



Race Track Industry Program

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Measuring the Impact of Racinos on Racing

Moderator/Speaker:

Jack Ketterer, Administrator, Iowa Racing and Gaming Commission

Speakers:

Kevin Kile, Gaming Operations Liaison, Pennsylvania Gaming Control Board

Richard Thalheimer, President, Thalheimer Research Associates, Inc.

MR. STEVE BARHAM: Welcome to a panel on "Measuring the Impact of Racinos on Racing." Before we get started I would like to thank the sponsors for this panel, US Bank Gaming Services. The refreshment break was sponsored by Caliente/MIR and the luncheon sponsor for today's luncheon down in the pavilion is AmTote.

Jack Ketterer is the administrator of the Iowa Racing and Gaming Commission, his bio is in the back and I'll let you read that. What I will say about Jack is that he is the guy in my advanced racing law class that I can always call and say I need someone to come and talk to the students about regulation of gaming and racing and how those two things work together and Jack is always a guy that will say, Yeah, and happy to do it, and gives the students a great presentation. So it is nice to have someone who not only comes to Symposium and is always willing to do everything we ask on panels but also comes to classes and actually helps the programs and talks to students.

MR. JACK KETTERER: I'm cheap.

I'm joined today by Kevin Kile who is the gaming operation's liaison for the Pennsylvania Gaming Control Board and Dr. Richard Thalheimer from Louisville who is familiar to many of you, having authored numerous market research and statistical studies related to the racing and gaming industry. And as Steve said, there is more information in the speaker bio in the back of your program.

We've been asked to relate our experiences on today's topic, "Measuring the Impact of Racinos on Racing," frankly, it's not an easy concept to get your arms around as we did some research on this. We will not come close to exhausting all

aspects or angles on this subject matter but hopefully if you do or will have or desire to have legislation authorizing casino games in your jurisdiction, you'll find something in the presentation today that will be of value to you when you return home.

I'm going to lead off today and save the power hitters for cleanup. We'll save some time for questions at the end, if you would come up to the microphone in front. With that we will get started.

In Iowa — just a little review if some of you aren't familiar with the racing schedule there — we have one horse track, Prairie Meadows, you can see the late spring thoroughbred meet, summer mixed meet, thoroughbred and quarter horse and a standardbred meet late in the fall.

We also have two greyhound tracks currently operating, Bluffs Run is a year round facility that has 300-plus performances and Dubuque Greyhound Park races from late April to late October with 160 performances.

This is a chronology of significant racing and gaming legislation in Iowa. Additionally, in 1994 wager and loss limits were removed from riverboats, launching seven new licensed locations in the next six years. In 2004 riverboats were permitted to transition to land-based casinos which prompted four additional new licensed locations.

These are areas identified which could be impacted by purse supplements from gaming which will be addressed in part. Dr. Thalheimer will talk about the last item, address that somewhat, revenues derived other than pari-mutuel other than from attendees; I know he is in the midst of an economic impact study for the horse racing industry in Iowa.

These are the purse amounts at Prairie Meadows over the last 10 years. The first five years, 1998 to 2002, were subject to a five-year agreement where purses escalated from just above \$12 million to actually it ended up being closer to \$19 million at the end of that five-year period. The original legislation did not specify what portion of gaming revenues would supplement purses, so it was an agreement between Prairie Meadows and the HBPA and the Iowa Quarter Horse Association and later on with the Iowa Harness Horsemen's Association. The purse amounts were reduced from 2003 to 2005 in another three-year agreement primarily due to the economy at that time, post 9/11, and also the county, the county being the landlord of the facility, they needed to fund a new arena downtown and so the horsemen agreed and Prairie Meadows agreed to reduce purses down to \$15 million during that period. And then finally in the 2004 legislation which took effect in 2006 as far as purse amounts, the purse supplement was statutorily set at 11 percent of net receipts from gaming.

This shows live handle since 2000 at Prairie Meadows. You can see in the top slide the thoroughbred trend is downward, that spring meet. The mixed meet in pink that occurred later in the summer is somewhat static, has tailed off a little bit.

The harness meet is much less and is somewhat erratic, their racing dates fluctuated, they started out in 1999 with only six dates and then went to 10 and as high as 20 and as low as 14, so that had some impact on the erratic line of their handle.

Simulcast import into Prairie Meadows, Bluffs Run and Dubuque Greyhound Park on top, you can see those colors, Prairie Meadows is at the top, Bluffs Run is the pink and Dubuque is the yellow. They show a declining trend but have bottomed recently. The export, Dubuque does not export their signal, Bluffs Run does and Prairie Meadows has similar results to export. Bluffs Run began to aggressively seek more locations in 2003 and they have shown some modest growth.

This is a graph of average field size versus net purse amount. Since experience in one of Dr. Thalheimer's studies has shown us an increase in average field size can positively impact handle I decided to see if there was a correlation to purses and average field size at Prairie Meadows. This is the Prairie Meadow's thoroughbred meet that takes place in the spring, you might focus on the tops of each pair of bars and if you do that you will notice that there does appear to be some relationship. From 2003 to 2005 the purses in the light green dropped and the average field size, which is in the blue with the numbers, dropped as well. Notice that 2006 appears to be an anomaly where purses rose significantly at the start of the 11 percent of net gaming receipts statutory legislation taking effect but field size didn't, maybe we'll show you something in the next slide that offers a reason for that.

This is average field size versus the opportunities per day, in other words, the number of races that are offered on a particular program throughout the meet. How much is average field size affected by the number of races? At the Prairie Meadows thoroughbred meet those opportunities per day were fairly constant at about nine to nine and a half, so the average field size changes were from other factors like purses as we saw in the previous slide. If you look at 2006, the number of opportunities per day was all the way up to 10 or 10.1 because during that meet Prairie Meadows offered a minimum of 10 races every day for an approximately 45- to 47-day meet. So even though as we saw in the previous slide for 2006 the purses in the light green went up significantly, the average field size did not, it stayed at 7.51. The reason, I believe, was that the number of opportunities per day jumped clear to 10.1 and diluted the effect that the purses had because there was less racing inventory available to fill those opportunities.

Slide 10, this goes to show all of the history for the last 10 years of Prairie Meadow's racing schedule and which makes any measurement of statistics at Prairie Meadows extremely difficult. Notice first the fluctuation in the number of days of the week, from five to four, back to five and then to four, and the different days of the week that racing was scheduled. There was never a period of time where the same racing days of the week were conducted for more than two years in a row. I can also tell you that even when the days were the same the post times

were often different. So all of the post times that were used during this 10-year time period, we really don't have enough slides to show that.

Moving to Prairie Meadow's mixed meet, this added to the annual confusion of the previous slide — until the last three years this meet raced on a different weekly schedule in the last half of the summer than the thoroughbred's meet in the first half. So if you asked a person who was at Prairie Meadows at the races if they knew the racing schedule, chances are that I don't think that they did.

So you have all of these variables, I would say that affected wagering at Prairie Meadows, purses, average field size, opportunities, days of the week, number of race days in the week, post times, export simulcast locations and schedules, import simulcast schedules, we've seen that we had new riverboats open in Iowa from '94 to 2000, four new casinos. Additionally, when table games started at the tracks in the 2004 legislation Prairie Meadows was under construction as were our two greyhound tracks, so the impact of those table games plus construction inconveniences to patrons. To determine the impact on all of these we will assign values to these variables and examine all the permutations of these variables that have occurred in the past 10 years in the next 197 slides, or not.

The bottom line, if you have racinos because casino gambling in competing markets is negatively impacting pari-mutuel wagering in your market, why would you expect pari-mutuel wagering to improve if casino gambling is located in the same building or next door? Now, export simulcasting may be the exception as higher purses may make the signal more attractive in other markets, but you are competing with many other tracks in an already crowded market for wagering dollars.

I'll show you again the same slide for purse amounts at Prairie Meadows and then I just wanted to take a quick look at the breeding industry in Iowa over the past eight years, since 2000. Standardbreds are in the yellow triangles, quarter horses are the pink squares and thoroughbreds are the blue diamonds and the red x's at the top are totals, you can see that if you compare the purse amounts in these next three slides — they will all be in the green — these are the thoroughbred foals registered, and you will see that thoroughbreds and in the next one quarter horses have declined. The number of registered foals in Iowa have declined somewhat in spite of purses, they somewhat follow purses but have not rebounded. I think that some of this can be attributed to breeders' consolidation of mares and foals of higher quality to try and catch up with the quality of the purse values at Prairie Meadows. You saw in the first slide of purses where during that first five-year agreement purses went up about \$2 million each year at Prairie Meadows and so the breeders starting from scratch and obviously they have about a three- or four-year timeline anyway to catch up before those horses are racing. I think that the breeders may be investing the same amount of money just not in the same numbers as they try to consolidate and try to have mares and foals of the quality equal to the purses that are being raced for at Prairie Meadows.

Standardbreds are a different story; we have a completely different ballgame with standardbreds in Iowa. There is a long history of non pari-mutuel standardbred racing in Iowa and the standardbred harness horsemen's association elected to have a meet with modest purses at Prairie Meadows in October at the end of their summer of racing at these non-pari-mutuel county fairs, and for their share of simulcasting and purse values more money went into supplementing purses at these county fairs. And so I think that one of the reasons that they've shown some steady growth in the number of registered foals can be attributed to the fact that they didn't have to catch up to the higher purses, they could continue to breed pretty much along the same level just improving gradually their quality each year. Since they were operating under a different agreement than thoroughbred and quarter horses, they did not have the dip in purse money between 2003 and 2005, you can see that their purses stayed fairly stable and actually even rose a little bit.

The other thing that we have in Iowa I think that needs to be mentioned that impacts this and impacts any breeder statistics that you have is that Prairie Meadows, as I said earlier, is owned by Polk County. It is operated by Prairie Meadows Incorporated which is a non-profit organization, the money that is not put back into the facility or that is not spent on purses and operating expenses must by law be given away to qualified recipients. Needless to say there is a long line that forms to get those funds and Polk County lays a pretty heavy hand on Prairie Meadows in terms of being first in line and taking a lot of that money. Prairie Meadows is subject to media reports on a regular basis and I think the breeding industry is negatively impacted by reports of those and local business in the political arena who feel that expenses of racing and the purses for racing are too high and that the non-profit licensee should be distributing more money in the community, and this gives some angst to the breeders and they are reluctant to invest a lot of money when they are not sure of the longevity of the program out three or four years when they would reap the benefit of those breeding seasons.

This is live handle for greyhound racing, it also trends downward at Bluffs Run and Dubuque. You can see that the registered greyhounds are showing steady growth in line purses, there is some leveling out over the past three to four years. There is no statutory requirement for purses for greyhounds, that has always been negotiated between the Iowa Greyhound Association and the racetracks, that increased as they usually use a barometer of a percentage of the after-tax gaming revenue. And then I think in 2004 for the next five years they entered into a long-term agreement because there was some question as to whether or not greyhound racing should be continued and the money that was spent in Iowa should be legislatively continued, same thing whether that money should go to the non-profit licensee to distribute for schools, libraries, education, Medicaid or some of those issues that were weighing on local and state government. So the five-year agreement gave them some stability both with purses and with breeding as you see over the last few years there.

One of the final slides that I'm going to show relates to participation, we wondered as far as participation if there was anything that would show increased

owner participation in the sport and the way that we thought that we might be able to measure this was through the number of owner's licenses issued by the commission and we didn't really, I don't think, come to any conclusion there that really showed anything of relevance at least in Iowa that we were able to determine, that was pretty flat.

In conclusion, I think that as far as measuring, I don't really think that anybody should expect if they have casino gambling that it is going to improve wagering on pari-mutuel races, it obviously can improve the bottom line for the facility and if that revenue is shared with horsemen or greyhound owners that can be a positive, but I think to provide a measurement for benefit in the breeding and economic development is where the focus needs to be and I think that bodes all the more for long-term planning or long-term growth or seeing out a long horizon, because that's what breeders have to plan for and as we've experienced in Iowa, psychologically that's difficult for them if they are really unsure if there is uncertainty as to whether their program will continue or be subject of each legislative session.

That concludes my remarks. Kevin, you thought I was kidding when I said that you would be cleaning up? He has an interesting program to proactively attempt to measure the impact of gaming on racing in Pennsylvania. I'm sure that you'll enjoy what he has to say. Thank you.

(Applause)

MR. KEVIN KILE: Hello, and thank you. I would like to begin by thanking the University for inviting me to be here on behalf of the Pennsylvania Gaming Control Board. With gaming having a direct impact on horse and harness racing I feel that symposiums such as this are very crucial to the industry. Gaming is really changing the landscape of the racing industry that we have all really known in the past.

As I'm sure that most of you are aware, Pennsylvania does allow slot machines at its racetracks. To date there are six racinos operating in Pennsylvania with the first opening in November of 2006. Today I would like to talk about how the Pennsylvania Gaming Control Board is beginning to measure the impact of gaming on pari-mutuel wagering in the commonwealth.

My name is Kevin Kile, I'm a gaming operations liaison at the Pennsylvania Gaming Control Board. The primary responsibility of my position is to act as a liaison between slot machine licensees, racetracks and other associated organizations, to the gaming control board on issues related to gaming operations including security, surveillance, facility design, accounting and internal controls. I've been actively involved in the opening of multiple racinos in Pennsylvania which are exceeding everyone's expectations at this point. Beyond this I also work closely with the Gaming Control Board Office of Racetrack Gaming to assist with supporting the reinvigoration of horse and harness racing in Pennsylvania.

I would like to start by giving an overview of the Gaming Control Board's goals as they relate to horse racing. Without understanding the environment or background of what we would like to measure it would be impossible to come to any reliable conclusion.

The Gaming Control Board is dedicated to supporting the intent of the Gaming Act in Pennsylvania as it relates to racing. We are supportive of the intent of gaming to assist the horse racing industry, support programs intended to promote horse breeding and improve the living and working conditions of the personnel who work and reside on the backside areas of racetracks.

To accomplish this, the Gaming Control Board established the Office of Racetrack Gaming. This office is responsible for coordinating the overall development and implementation of policy and procedures designed to accomplish the intent of the Gaming Act in Pennsylvania as it relates to racing and the office of the Gaming Control Board liaison to the Pennsylvania horse and harness racing commissions. We also work closely with horsemen's organization and licensed racing entities to ensure that improvements to the backside areas of racetracks are being performed. Also and the reason that I am here today, the Office of Racetrack Gaming is responsible for overseeing each licensed racetrack's plan for the distribution of funds from the Pennsylvania Racehorse Development Fund. A large part of this includes measuring the impact of these distributions on the racing industry.

In measuring the impact of gaming in Pennsylvania it is important to understand the tax structure of Pennsylvania's gaming industry as it relates to racing. An amount equal to 18 percent of daily gross terminal revenue from slot operations is deposited in the Pennsylvania Racehorse Development Fund unless these daily assessments are effected by a daily assessment cap, which is at 12 percent. The fund is considered a catalyst to help promote the success of racing and is allocated as follows: 80 percent is deposited weekly into a separate interest-bearing purse account which is established by and for the benefit of the horsemen. These funds are combined with revenues from existing agreements to fund purses for live races. For thoroughbred tracks 16 percent is deposited on a monthly basis into the Pennsylvania Breeding Fund. For standardbred tracks eight percent is deposited on a monthly basis into the Pennsylvania Sire Stakes Fund and another eight percent is deposited into another account known as the Pennsylvania Standardbred Breeders Development Fund. These three funds are intended to stimulate and sustain the commonwealth's thoroughbred and standardbred breeding industry with rewards for owners and breeders of Pennsylvania's top racers. Stimulating the success of the equine breeding industry not only provides economic incentives, we believe that it also encourages competition which should result in stronger and healthier horses. And lastly, the remaining four percent is used to fund health and pension benefits for members of the horsemen's organizations.

Total gross terminal revenue in Pennsylvania exceeded \$1 billion as of the end of 2007. Of this amount, \$128.5 million has been deposited into the

Pennsylvania Racehorse Development Fund. The amount paid into this fund has been allocated as follows: \$102.8 million has been allocated towards purses; \$8.6 million has been allocated to the Pennsylvania Breeding Fund; \$6 million has been allocated to the Pennsylvania Sire Stakes Fund; \$6 million has been allocated to the Standardbred Breeders Development Fund; and \$5.1 million has been allocated towards health and pension benefits for the horsemen.

So how are we beginning to measure the impact of gaming? First we had to understand the background of gaming legislation in Pennsylvania as it relates to racing, which I just went over. Next we identified a need to monitor the racehorse development fund and to track changes from year to year; this will be expanded on in the future as more data becomes available. We use this information to store and identify proper indicators required to measure the impact of gaming on racing. It should also be pointed out that the gaming control board does not have regulatory oversight of the racing industry in the commonwealth which lies with the Pennsylvania Horse and Harness Racing Commissions. We consider these two organizations our sister organizations because of the direct impact that our respective industries have on one another.

After meeting with the racing commissions it was determined that gaming would obviously have the most direct impact on purses which along with successful management and marketing from all parties involved will impact and hopefully increase live racing handle in the commonwealth.

Next we had to determine the most effective way to gather required data. Upon request from the gaming control board, representatives from racetracks and horsemen's organizations provided information to us showing full cooperation of all parties in Pennsylvania to pull resources together for a common interest. Lastly we had to determine an effective way to present the data. With the goal of reinvigorating horse racing it was determined the best way to measure specific categories of live handle and other indicators was as an industry whole. As an example, we took live racing handle wagered on-track at each of the six racinos, combined them as a sum and compared this industry total to the same information from the prior year when gaming did not exist.

Now I would like to present some of our results after one full year of gaming. Although these figures are helpful, I would like to point out that the gaming market in Pennsylvania is not yet stable. Significant construction of brand new gaming facilities are making it very difficult to draw accurate conclusions. In fact, after the first year the figures are relatively flat. These figures are being gathered now with the goal of being able to identify future trends when the market stabilizes. Along with figures from 2006 and 2007 I would also like to present raw figures through the first three quarters of 2008.

Purses earned. Higher purses are intended to attract better horses to the racetracks, this is done to promote more interesting racing and hopefully encourage more patrons to visit the tracks. The industry total of all purses earned in Pennsylvania increased by 162 percent, from \$55 million in 2006 to \$144.3 million,

in 2007. The total of all purses earned through the first three quarters of '08 was \$152.2 million.

Purses Paid. The industry total of all purses paid in Pennsylvania increased by 88 percent, from \$62.3 million in 2006 to \$117.2 million in 2007. The total of all purses paid through the first three quarters of '08 was \$140.5 million.

Race days. With the addition of new tracks in Pennsylvania, we had two new tracks, Presque Isle Downs in Erie, Pennsylvania, and Harrah's Chester Downs in the Philadelphia area. With the addition of these two tracks the total number of race days has increased, the industry total of all race days in Pennsylvania increased by 10.9 percent, from 756 race days in 2006 to 838 race days in 2007. The total of all race days through the first three quarters of 2008 was 749.

Live races. Along with the increase in race days, the total number of races has also increased. The industry total of all live races in Pennsylvania increased by 15 percent, from 7,958 live races in 2006 to 9,153 live races in 2007. The total of all live races through the first three quarters of '08 was 8,424.

Live racing handle wagered on-track, which is total wagers placed on a racetrack on live races run at that same racetrack. As an example, and this is how the rest of the figures are going to be moving forward, total wagers placed at Philadelphia Park on races run at Philadelphia Park to give you a better idea. As the gaming market stabilizes and interest builds the amount wagered on live races should begin to increase. The industry total of all live racing handle wagered on-track in Pennsylvania decreased one percent, from \$41.3 million in 2006 to \$40.9 million in 2007. The total of all live racing handle wagered on track through the first three quarters of '08 was \$36.2 million.

Live racing handle wagered through phone or account wagering, which is total wagers placed through a pari-mutuel facility's phone wagering system on races run at that same pari-mutuel facility. The industry total of all live racing handle wagered through account wagering or telephone increased by 6.6 percent, from \$13.8 million in 2006 to \$14.7 million in 2007. The total through the first three quarters of 2008 was \$11.1 million.

Off-track, live racing handle wagered off-track. This is the total wagers placed at a pari-mutuel facility's off-track locations, at that OTW operator's live racing facility. The industry total of all live racing handle wagered off-track in Pennsylvania decreased by 12.2 percent, from \$27.6 million in 2006 to \$24.2 million in 2007. The total through the first three quarters of '08 was \$23.7 million.

Total export. The total of all export in Pennsylvania increased by 9.6 percent, from \$497.6 million in 2006 to \$545.5 million in 2007. The total through the end of the first three quarters of 2008 was \$513 million.

The industry total of all live racing handle including export — which is all the past figures that I presented plus export in Pennsylvania increased by 7.8 percent,

from \$580.3 million in 2006 to \$625.3 million in 2007. The total through the first three quarters of '08 was \$584 million.

And finally total handle. These figures include import and they are used for the basis of pari-mutuel tax in the state. Though still important, we believe that slot operations in Pennsylvania do not directly, they indirectly impact total handle because it includes import. At the same time we feel it is still important to measure because it can be a very good indicator of the impact gaming is having on simulcast wagering at the casinos or attendance generated from patrons visiting the casinos and hopefully moving over into the racetracks. The industry total of all handle in Pennsylvania decreased by 4.4 percent, from \$974.8 million in 2006 to \$931.9 million in 2007. The total through the first three quarters of 2008 was \$651.1 million.

All these stats are available on our Web site, in fact, they are in much greater detail by month. We plan on updating them to include all of 2008 after the first of the year.

Just to conclude, I wanted to speak briefly about where we would like to go with this in the future, there are many other benefits, of course, I specifically looked at the impact on pari-mutuel wagering but there are many other benefits of gaming beyond just the pari-mutuel wagering industry, there are many more areas that could be impacted by gaming. One such area is the equine industry as a whole. With gaming having a direct impact on racing, gaming will impact the overall equine industry as well. According to a study released in the summer of 2003 by Penn State University, Pennsylvania's equine industry is preserving more than a million acres of state farmland, \$8.2 billion or 18 percent of agribusiness sales, the states largest industry, can be attributed to horses. The industry also employs in excess of 20,000 people; all of this is before casinos arrived in Pennsylvania. A more specific example could be revenue generated from hay; according to the same study in 2001 Pennsylvania's racehorse industry spent almost \$8 million on hay. The general horse population in the state spent another \$33 million. Other examples could be indirectly impacted by gaming are revenues generated from boarding, training, veterinarian care, bedding, grooming supplies and so on.

One last area that I did have indirectly impacted but I think they are definitely directly impacted are the fairgrounds in Pennsylvania. There are 116 fairgrounds throughout Pennsylvania and only 14 of them hold racing every year. Looking back 10 years ago there were 22 fairs that were holding racing, so hopefully that will change in the near future.

These are all areas that we would like to measure in the future and that is all I have today. I would like to thank you again for allowing me to be here today and I would be glad to answer any questions at the conclusion of the panel. Thank you.

(Applause)

MR. KETTERER: The next speaker will be Dr. Richard Thalheimer and he has taken a little different approach in the study that he will share with us. He will inform us how racing impacts gaming at racinos.

DR. RICHARD THALHEIMER: Thank you, and it is a pleasure to be here. I think that this is my 20th year at the Symposium, which makes me a very young man compared to some of these folks right here in the front row here.

I'm here today to talk to you about results of a study, a statistical analysis that I recently completed for a coalition of the horsemen and breeding groups, all those organizations in the State of Iowa. And this study, "An Economic Statistical Analysis of Racing and Slot Machine Wagering at Prairie Meadows Racetrack and Casino," the objective of the study was to measure the impact of changes in pari-mutuel factors, gaming factors and general economic factors on both slot machine and pari-mutuel horse race wagering on-track at Prairie Meadows, just as an example of what happens at a racino, both sides of the racino when you have this sort of gaming at a racetrack. Of particular interest and a focus of this study was the interrelationship between both sides, the gaming and the racing side of the racino. To do this we developed two economic statistical wagering models, it's called econometric models, but economic statistical makes more sense, one for slot machine wagering and one for pari-mutuel horse race wagering on-track; we didn't look at the determinants of export handle, which is another case. The models allowed us to measure the effect of a number of key factors, as I just mentioned, on both racing and gaming at the racetrack. And a very important factor here is that this statistical method allows the researcher to look at the impact of any particular factor, say, slot machines at the racetrack, the number of slots on slot gaming and on pari-mutuel wagering, holding constant changes in all the other factors over time. This is a problem that Jack alluded to a little bit earlier that so many things are happening at once that it's hard to control; well, this statistical method allows the researcher to do just that. You can't just look at trends and data and make conclusions, because you can conclude anything, you have to control for these other events happening at the same time.

The study period for the analysis, there were two different models, one for horse race wagering, and the horse race wagering starts in 1993, January '93; racing actually started up in '89, but 1993 was the year subsequent to 1992 or after 1992 where the racetrack was just coming out of bankruptcy, and in 1992 there was no live racing, just simulcast racing at the racetrack. The study period was monthly through December of 2006, the latest year for which data was available at the time that I did this study. The slot machine model, basically using the same factors, of course, started a little bit later because it started when slots came in April of 1994 and went through 2006 as well.

Just another aside and something that Jack alluded to earlier, Prairie Meadows was the first racetrack racino in the United States that had live table games at the racetrack, and that occurred at the end of 2004 and that was part of this modeling effort as well. The question was what impact do table games have on slot as well as pari-mutuel racing handles at the racetrack?

So here are the factors that we looked at, here are the factors for each equation, each model, both the gaming model and the horse race wagering model. The first one is called seasonality, that is, monthly data that you have to control for the month, the time period that you're looking at the changes in handle. Winter months you would expect to have more negative impact on handle than summer months, especially in Iowa, especially like right now. Per capita income of the market area is another important factor, and the market area in this case is defined as 100-mile radius around Prairie Meadows. Gaming factors, again, gaming factors appear both in the pari-mutuel wagering model as well as the gaming model. Gaming factors that are identified and included in this effort were the number of slot machines at Prairie Meadows, the win percent, which I don't know if any of you who have followed my research over the years but one of the things that I've been harping at is changes in the takeout rate for horse race wagering, win percent is the thing, it is the price of wagering for the consumer for slot machine gaming. You would expect that as win percent goes up slot gaming handle would go down, the same as takeout rate for pari-mutuel handle, and conversely as win percent goes down you would expect slot handle to go up. And then there is the number of table games at Prairie Meadows which started at zero and ended up at the end of the period at 57.

On the other hand we looked at the pari-mutuel factors common to both pari-mutuel wagering and slot gaming at the racetrack and those pari-mutuel factors are familiar to all of you, the number of live race days in a month, the number of import simulcast horse and dog races per day over this time period, horse and dog racing year round, live racing four and a half to five months of the year. The next one is purses, average daily purses. And another factor for quality racing at the racing, quality racing is measured at Prairie Meadows, it is called the Festival of Racing, they have a Grade 2 stakes race, good quality races for the month of July, although a little bit each way around that but mostly in the month of July. And then finally competition from two casinos, an Indian casino and a riverboat, both 45 to 50 miles from the Prairie Meadows site. Those were the factors.

Now let's look at the data, handle, look at slot handle, this is a big focus of this study. Slot handle over this time period increased from \$1.5 to \$2.6 billion dollars, an increase of 72 percent. So you can see slot handle going up rapidly and then kind of leveling off, going along with the number of slot machines, increases from the slot machines from 1,100 to 1,700 and leveling off at that latter amount.

Now, adjusted handle is a little bit different story. You can see again slot handle increasing, peaking in 1999 and then decreasing through 2006. In fact the decrease from 1999 through 2006 was about 18 percent. So slot handle adjusted for inflation, it didn't level off, it actually has gone down 18 percent over this time period. There are a couple of important things that happened in here from a competitive viewpoint. You can see where the Lakeside Casino, which is say 45 miles away, it is a riverboat, when it opened you can see a fall in handle, slot handle. And next to that, the Tama Indian Casino you see an increase in handle

and the reason for that is that over this period that Indian casino was closed for eight months. So over that eight months when it was closed slot handle went up, but of course when it went back in business slot handle went back down. So it allowed us to measure the impact of the Tama Indian Casino which was there for the entire period.

Here is the meat of the study and here are some of the results, I didn't put them all here but here are some of the important results. First, for slot handle, slot handle increased 17 percent as a result of the win percent declining from eight to 6.4. So if you pay the customers back more and they bet more. The question is how much more do they bet? Well, in this case that decrease in the win percent is a 20 percent decline, so win percent went down 20 percent, slot handle went up 17 percent, the racino lost money by doing that, there is a point at which you can't lower that win percent or the takeout rate anymore because it won't be offset enough by the increase in handle to account for that. And I will tell you that in 2007 and '08 you can see a creep back up in the win percent at Prairie Meadows, and it was the correct thing to do because even though slot handle went down it corrected for this over lowering of the win percent; I think today it is eight or nine percent.

The next thing that we found, of course, and you would expect this, as the number of slot machines increased from 1,100 to 1,700, slot handle went up 24 percent. And again, all these impacts are impacts holding constant changes in all the other factors occurring at the same time, so you are isolating each one of these impacts.

And of great interest are the impact of table games on slot handle at Prairie Meadows, and there we found that it went down eight percent. Now, total win went up, that's not in my talk here, but total win went up, but what happened was that some of it was borrowed from slot handle, from slot players, so slot handle went down.

Jack has mentioned that there was construction at the time which might confuse us a bit, but there is also in this statistical model what is called a trend factor which accounted for things like that that aren't explicitly in there, that is, if you have changes over time, big changes, this model will pick it up and hold it out when you look at the other changes.

And again I might mention that on the table game impact I found the same thing with the statistical analysis of riverboats in Iowa, Illinois and Missouri that I did several years ago and published, that study showed the same thing. There are table games, differences between riverboats, slot handle was lower with those with the greater number of table games, so it just confirmed what we found.

External competition, something which Prairie Meadows has no control over from these two casinos, the Indian casino and the riverboat casino, caused slot handle to go down 25 percent. So there is something that you can't do anything

about except market your product or spend money to try and counteract that, but that is not under the control of the casino.

Now, this is the crux of the findings of this study when you look at what happens when there is live racing and simulcast racing at a racino. The first thing that we found is that slot handle goes up in months where there was live racing, live horse racing at the racetrack, it went up about 13 percent. Same thing for simulcast wagering is that in this instance we looked at the number of import simulcast of horse races, went from about three a day to 15 a day, a huge increase over this time period. And again we found about the same impact as having live racing, about 13 percent; now, that is 13 percent of a very large number which I will show you in a minute, the slot handle. And again, there was another interesting thing we found when there was a stakes race, the month of July especially at Prairie Meadows where there are very good stakes races, slot handle again went up almost 12 percent.

Now, that one, in that case part of that is because it is in July which is a good month whether you have the good racing or not but this would be more than what would normally be expected. And this is a finding of the same sort of finding that we did at Mountaineer Park, that I did of Mountaineer Park a number of years ago which showed that when there were stakes races slot handle went up.

Now here is the other side of the coin, you put slots at the racetrack and slots in this case, table games both, slot handle went down 33 percent. So that is not unexpected, we found that in many other studies. Anyone who runs a racino will tell you, I think if they are observing – again, these increases and decreases are adjusted for inflation but you will always find that pari-mutuel handle goes down when you put slots at the track. You know what happens when they are outside the track and that's why they are putting them at the track, so we expect slot handle to go down we just expect the amount going to purses to create something else in its stead.

Now, comparing this study to the Mountaineer study that I had done earlier of the racino at Mountaineer, a racino that currently has, I don't know currently, but over the time period I looked at for it, up to 3,000 slot machines, much bigger than Prairie Meadows, and there we found that pari-mutuel handle went down 39 percent as a result of growth in the number of slot machines. On the other hand we found at Mountaineer, which has year round, 52 weeks a year racing, that slot machine went up 22 percent when there was live racing, and this was weekly data over that time period. Again, that is plus 22 percent of a very large number and the 39 percent decline in pari-mutuel handle, that seems like that's bigger than the increase in slot handle except that the amount of wagering on track is very small. So the 39 percent decline on-track pari-mutuel handle is a small dollar number relative to the huge increase in slot handle because of the live racing.

So now let's look at live racing, what impact does live racing have on slot handle at Prairie Meadows in dollar terms and does the live racing offset in part or total the amount of purses paid at the racetrack, and it did in the prior study of

Mountaineer, the increase in slot handle more than offset the amount of purses plus contributed to operating cost. In this case pari-mutuel revenue for the year 2006 was \$4 million, slot machine revenue for the same year was \$164 million, and again, this pari-mutuel revenue is from all sources, export as well as on-track. And purses paid from the slot revenue were \$17.8 million by statute, it is 11 percent of the slot revenue and there is a cap over which it is six percent, I think that is \$200 million in slot revenues but they weren't at that point for this study, they were at \$164 million.

So translating those finding into dollar amounts you find that at a 12.9 percent increase in slot handle when there is live racing resulted in a \$7 million contribution to slot revenues, that is, that if there was no live racing for four and a half months that year, slot revenues in 2006 would have been \$7 million less. Now, that is for four and a half months or 4.4 months; if they race nine months you can double that. Of course, there is a cost associated with running more and all that has to be balanced out, but you can determine now what would happen if you had live racing over the year.

Import simulcast racing, 12.9 percent, remember that is year round, everyday of the year and this is horse races not greyhound in this particular case. And again, that is 13 percent of \$164 million, it accounted for \$18 million of that 164. So by having horse racing, both simulcast and live racing at the racetrack at this racino, at least from this study and these estimates, that live racing and simulcast racing generated \$25 million in revenue that would be lost if that racing were gone. That \$25 million in revenue remember compared to \$18 million in purse expense, but it's an expense to the racetrack, but not quite, because it is an amount that comes out of total gross revenue as determined by statute, it doesn't come out necessarily from the racetrack itself, it is the determination of the legislature that that money be used in terms that was granting a license to nurture the horse racing industry in Iowa.

So just to summarize, increased slot revenue of \$25 million from live and simulcast horse race wagering more than covered the cost of purses and contributed a great deal to operating cost on the pari-mutuel side of the racino. Add to that another \$4 million that was generated from pari-mutuel wagering that year of 2006 and you get \$29 million, which basically covered the cost of the whole operation. One more thing that I will mention here at the bottom of this slide is that I didn't include table games, I didn't have enough information to look at the impact on table games over this time period, but of course the guess is that when you have live racing the table game revenue goes up, maybe even more than for slots because there is more relationship possibly to horse racing for table game players than for slot players but both are significant.

And with that I will turn the program back to Jack. Thank you.

(Applause)

MR. KETTERER: Thanks, Richard. We have time for some questions if anyone has them and then we will get you out of here in time to get a good seat for lunch.

A VOICE: Could you let us know approximately how many jobs are related to the horse industry in Iowa?

MR. KETTERER: I think at Prairie Meadows there are probably in excess of 1,000 employees. Now, the horse industry, I don't know if you've looked at that in your economic study?

DR. THALHEIMER: Actually, I hesitate to give any results of this impact study which will be coming out in the next few weeks. So we do have an estimate but not at this point.

A VOICE: I have more of a comment but I would definitely appreciate a response in light of Dr. Thalheimer's takeout question; it seems to me if Pennsylvania especially were interested in increasing pari-mutuel handle with the help of slot machines its takeout on trifecta wagering would not be a ridiculous 30 or 31 percent which is among the highest in the country. I just don't see why the bettors in that state should suffer that kind of takeout rate when the slot players get half that or less.

DR. THALHEIMER: Well, let me take a go at that. I have — talking about the takeout rate, I have been coming here for 20 years and the takeout rate for horse racing is very high. There is a point where you should be lowering that takeout rate to the point where the next step down below that, as you lower it, the next step down, if the handle doesn't go up enough to offset that decrease you stop, that is the optimal point. So let's say that it is 33 percent, the optimal point is not going to be six percent, it's not going to be eight percent. It will be somewhere lower than 30 percent, and you need to do or have a study done looking at the way handle has changed over time as takeout rate has changed and you can determine mathematically where that point is. I've done several studies that have been published and you are welcome to look at them but it is almost always lower than the existing takeout rate. Now, there are some tracks today that have experimented, I know Keeneland has experimented with a 16 percent take, they don't publicize it but they have done it, their 19 percent to 16 percent on exotics, on all exotics. I don't know if it is just for certain ones, I know at one point they lowered it on all of them, so there is enough information there that you may be able to find out something. Takeout rates have always been high. It's a costless thing to change the takeout rate, it doesn't cost anything and it should be tried, it has just been tried helter-skelter over the years with no real design, and with competition from casinos it is time to do it.

MR. KETTERER: Any other questions?

A VOICE: Inaudible.

MR. KETTERER: I don't think that is the purpose but I think that is what his study is showing. I don't want to speak for him, I think that is what his study is showing that actually if Prairie Meadows did not have horse racing, if they just had casino gambling that their gaming revenue would be less. I don't think that was the purpose of the legislation, that kind of put the cart before the horse, if you will.

DR. THALHEIMER: I will add to that. That was not the design of any of the legislations in any states. In fact, we are just finding out, just being able to quantify that impact and it turns out that it is a fairly large impact. We were at a conference earlier this year where the president of the Mohegan tribe's racetrack, Pocono Downs, said from his slot player information, slot player information that people who came to the races to bet the horses also bet slot machines; we just haven't known an order of magnitude.

Now, what the intent of most legislation in most states is to help purses, and in many states the language is something like to preserve and promote or nurture, something like that, for the horse racing industry in light of competition like casinos and the lottery, not necessarily explicitly saying that but that's what it's been. I think that both of my fellow panelists have mentioned that one of the effects to nurture and promote the horse racing industry is the effect of purses on breeding, and we found there a very strong statistical relationship between increase in purses, yearling prices and from those increased revenues to breeders, increase in supply of horses and preservation of greenspace, that all goes together. That is not necessarily a profit-making proposition for the racetrack but it is for the industry as a whole. The other thing is today, a very important factor is that with higher purses from a racetrack which basically had no purses like Prairie Meadows or Mountaineer or Charles Town, export handle has grown enormously. The revenue from the export handle is much smaller than it is for on-track handle but that's an area that can be improved. So in the future it seems to me that the purse impact is going to have to be not so much on-track and looking at live handle — if you measure the success of a racino program by the change in live handle you will always say that it has been not successful. So the question is does it promote the industry and are there ways for that gaming revenue to increase if you had hand-held — New York is going to this — if you had hand-held betting all over the state and it made it convenient and you had good quality racing you have a chance to have higher revenues, today it's the distribution, I think?

A VOICE: I would like to share with the group some statistics from Oklahoma, and these are off the top of my head so pardon me, but I'm the general manager of Remington Park, Oklahoma's premier racetrack. As opposed to the situation at Prairie Meadows there has been a constant legislative support of our gaming which we were able to open in November of 2005 and so there is none of the uncertainty involved in possibly pulling the rug out from under the breeders, and the question that I asked earlier about the number of jobs in the racing industry is because in Oklahoma we think there are around 25,000 jobs just in the full-time horse racing industry. Our number of licensees has gone from about 6,000 to 10,000 in the ensuing years. Our live handle has improved about 3.5 to four percent in the past three years since the casino opened. Our export increased 138 percent in the first

two seasons and has leveled off substantially since then. Dr. Thalheimer's numbers on the increase in slot revenue related to live racing certainly hold true in our case. Now, one factor that I'm not particularly pleased to see but I will share with the group is that of our top 200 horseplayers that we are able to track electronically, a number of them don't want to be tracked, but the ones that have a card that enables us to track their play, we find that of our top 200 players they are playing 40 percent slots and only 60 percent racing. So we do find the slot business cannibalizing a key group of people who were primarily horseplayers ahead of that. We have been able to hold the line on live handle.

A VOICE: Jack, either for you or Dr. Thalheimer, I'm curious whether the same phenomenon that had happened at Prairie Meadows occurs at Dubuque running only six months of the year? I know counts at Bluffs running year round would be difficult to gauge but what about Dubuque, is that the same situation there?

MR. KETTERER: Well, I don't think they've done a study. Dr. Thalheimer was engaged to do the study at Prairie Meadows and I'm not aware that there is any data available for Dubuque.

A VOICE: I would like to ask the gentleman from Pennsylvania a question. The expansion of gaming in your state resulted in numerous additional racing activity with the creation of some new tracks that had not existed before, correct me if I'm wrong, you added additional racing opportunities but the state of Pennsylvania did not provide any funding for the state racing commission to conduct any drug testing or provide for stewards in the stand. I would like to try and understand what the thinking was for that and I would like to also ask you does the gaming commission have any discretion to basically deal with what has put a tremendous strain on the Pennsylvania racing commissions?

MR. KILE: You are exactly right. There is no additional funding for the state harness and horse racing commission. Unfortunately, I don't think that any of them are here today.

A VOICE: They have an out-of-state travel ban as I understand. They aren't allowed to be here.

(Laughter)

A VOICE: Does that apply to you? I mean, I hate to put you on the spot but there is kind of a difference in how these issues are approached.

MR. KILE: There are two new tracks, Presque Isle Downs and Casino in Erie, Pennsylvania, and Harrah's Chester Downs in the Philadelphia area. They are operating on the same budget, they get 1.5 percent of total handle and I know that they are actively looking towards hopefully changing that.

A VOICE: There seemed to be a windfall for certain aspects of the industry but somebody seemed to get left at the gate.

MR. KILE: Yeah.

MR. KETTERER: Any other questions? We appreciate your attention and your attendance and thank you very much.



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