Economic Impact Analysis: The Potential Impact of an NHRA Drag Racing Facility in Lancaster County

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Entertainment venues are an important component to the quality of life in cities and states. Venues provide local residents with an opportunity to attend events that interest them without requiring them to travel to another city. This saves local residents money and allows residents to attend more events. Both factors increase the quality of life for local citizens, in much the same way that having more local shopping options raises the quality of life.

Lincoln’s need for new entertainment venues to improve the quality of life and to retain or attract younger residents has been a recent topic of discussion in the city. For example, a new arena and other facilities have been discussed for the downtown area. This analysis considers another potential entertainment venue for the Lincoln area: a National Hot Rod Association (NHRA) Motorplex Facility. In particular, Nebraska Motorplex has recently proposed developing and operating a motorplex venue in Lancaster County. This analysis considers the annual economic impact of such a NHRA Motorplex Facility. That is, the jobs, income, and economic activity that would be generated each year as a drag racing facility attracts visitors to the Lincoln area or helps retain the spending of local motorsports enthusiasts within the county. Such an economic impact would be in addition to the quality-of-life benefits discussed above.

The economic impact estimate focuses on the potential “tourism” impact of the drag racing facility due to the spending at area restaurants, lodging places, and retail outlets either by 1) tourists attracted to the area, or 2) local residents who would otherwise travel out of town to Topeka, Denver, or other regional tracks to attend or participate in drag racing events. The report uses conservative assumptions and focuses on the tourist impact.

The analysis does not consider any economic impact:
1) during the construction of the facility, or
2) from track personnel and operations expenses.
Four steps were taken to estimate the spending by visitors or retained spending from local residents. Throughout the steps, we utilized conservative assumptions to estimate spending:

1) We estimated the total number in attendance at a NHRA Drag Racing Facility over the course of a year. We differentiated between regional and local races, which are held regularly, and periodic divisional events.

2) We estimated the share of those in attendance who reside outside of Lancaster County or outside of Nebraska. Note that even local events attract some out-of-state attendance and participation.

3) We estimated spending profiles for those visitors from outside the area to calculate total new “tourist” spending for Lancaster County due to drag racing events.

4) We estimated spending retained by local residents who are now able to attend or participate in more events locally.

Events

We analyzed the schedule of 8 other drag racing facilities in Nebraska’s NHRA region to determine the number of events held including regional races, local races and periodic divisional-type events. The 8 drag racing facilities on average hosted two divisional-type events each year, in addition to dozens of regional and local events.

Based on this data, we estimated that a typical track would host approximately 60 days of racing per year, though more successful tracks hosted more days. We utilized 60 days of racing in our baseline analysis. Most of those days represented local and regionally-oriented events. We conservatively estimated approximately 1,000 in attendance for local race days based on data taken from a questionnaire of drag racing facilities within Nebraska’s NHRA Division. We estimated 8,000 in attendance on
average for race days for the two divisional-type events.\(^1\) Note that this was less than the average reported by other tracks for major events in existing research studies.\(^2\)

**Residence of Those in Attendance**

We utilized data from two studies of a drag racing facility in the Topeka, Kansas area to determine attendance patterns for the divisional-type events. Those studies used survey methods to determine the percentage of fans that came to a NHRA Championship Event from outside of the state and outside of the county to attend racing events. We utilized these percentages for our analysis of divisional-type events at a NHRA Racing Facility in Lancaster County, due to similarities between Topeka and Lincoln. These percentages were applied directly for the divisional-type events. For local events, a breakdown for the origin of spectators and participants was developed using data from a questionnaire of drag racing facilities in Nebraska’s NHRA region.

In all cases, we multiplied the estimated event attendance from above by these percentages to estimate the number of visitors to the drag racing facility from outside Nebraska, outside of Lancaster County (but within Nebraska), and within Lancaster County.

The Topeka study also had an estimate of the number of local residents who attended the NHRA Championship rather than traveling to other races out of state. We used these data to estimate the number of local persons in attendance that are retained in the area.

**Spending Profiles**

The Topeka studies, and other studies for drag racing facilities in Brainerd, Minnesota and Immokalee, Florida\(^3\), also provided profiles for visitor spending on lodging, retail, and food. We took the lowest estimate of total spending besides ticket

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\(^1\) We assumed that rain would affect attendance in one out of every 6 days of racing.

Byrne, Paul F., 2005. *The Economic Impact of Motor Sports on Shawnee County*. Washburn University, School of Business.

purchases per visitor per day from the four studies ($91) as the basis of our visitor spending estimate for a NHRA Drag Racing Facility in Lancaster County.

One of the Topeka studies also estimated, based on surveys, separate spending profiles for out-of-state visitors, out-of-county (but in-state) visitors, and in-county visitors. Again, the profiles included spending on lodging (for out-of-state and out-of-county visitors), retail, and food. We used these estimates to differentiate between the spending patterns of out-of-state, in-state and in-county visitors.

These spending profiles were multiplied by the number of annual visitors that were calculated earlier in order to estimate the total spending by out-of-state, out-of-county (but in-state), and in county visitors of the proposed Motorplex Facility. This was the basis for our economic impact estimate.

**Economic Impact**

**Direct Economic Impact**

The direct annual economic impact of the proposed NHRA Motorplex Facility on Lancaster County is the sum of the estimated spending by out-of-state visitors, out-of-county (but in-state) visitors, and retained in-county visitors. This sum is estimated at $7.8 million. The direct annual economic impact of the proposed drag racing facility on the State of Nebraska is the sum of out-of-state visitors and retained in-state visitors. This is estimated at $4.5 million per year. Both estimates are provided in Table 1 below. The direct impact on Lancaster County is greater due to spending by out-of-county residents from other parts of Nebraska, such as Norfolk or Omaha.

<table>
<thead>
<tr>
<th>Spending (millions)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lancaster County</td>
<td>$7.8M</td>
</tr>
<tr>
<td>Nebraska</td>
<td>$4.5M</td>
</tr>
</tbody>
</table>

**Table 1**

Direct Annual Economic Impact from Visitors and Retained Spending

Sources: Event schedules and attendance from other regional drag racing facilities and spending profiles from studies of other drag racing facilities.
Total Economic Impact

In addition to this direct effect, there is an additional “multiplier effect” on the local and state economy. The multiplier effect occurs as money attracted to or retained in the area by the drag racing facility “circulates” through the Lancaster County economy. For example, restaurants, lodging places, and retail stores that gain customers due to the drag racing facility make additional purchases of supplies and services from other Nebraska businesses. Similarly, restaurant, hotel, or store employees also spend their paychecks at other Nebraska businesses. Both types of spending contribute to the multiplier effect.

Such multiplier effects are typically modest for entertainment venues, roughly 25% as large as the direct effect. We calculated relevant economic multipliers for Lancaster County (and the state) using the IMPLAN software and applied them to the direct economic impacts from Table 1. We then added the multiplier effect to the direct economic impact to yield an estimate of the total economic impact.

Our estimate of the total annual economic impact of the proposed drag racing facility is provided in the first column of Table 2 below. The table shows the estimated impact for both Lancaster County and the State of Nebraska using our conservative approach. The total annual impact for Lancaster County is $9.9 million, a substantial tourism impact for the county. The total annual economic impact for Nebraska is $5.9 million.

\[
\begin{array}{|c|c|c|}
\hline
\text{Total Economic Activity (millions)} & \text{Equivalent Jobs} & \text{Wages (millions)} \\
\hline
\text{Lancaster County} & $9.9M & 200 & $3.5M \\
\text{Nebraska} & $5.9M & 120 & $2.1M \\
\hline
\end{array}
\]

Sources: Spending estimates in Table 1, IMPLAN software and Bureau of Business Research calculations.
Note that Table 2 also provides an estimate of the total annual wages and employment associated with the economic impact. There is an estimated annual impact of $3.5 million on wages in Lancaster County. This is the earnings of approximately 200 full-year jobs in the relevant industries. Note, however, that these earnings would actually accrue to an even larger number of workers during those days that the Motorplex is open for racing. The earnings could mean additional employment during these days or simply more hours worked (and more earnings) by year-round employees. For the State of Nebraska overall, there is an estimated annual impact of $2.1 million worker earnings, which is the equivalent of 120 full-year jobs.

**Full Potential Economic Impact Estimate**

Throughout the analysis we have utilized a conservative approach to estimating economic impact. It is possible that a NHRA Motorplex Facility in Lancaster County could have a much higher annual economic impact than we estimated in Tables 1 and 2. For example, one other regional track we examined had twice as many large divisional-type events as we used in our baseline estimates. Under such a full potential scenario, the estimated economic impact would be $23.2 million for Lancaster County and $14.6 million for the State of Nebraska. The associated worker earnings and employment impacts also would be higher.