

DEE AMPHITHEATER AND PAVILION AT NEW HARMONY PARK





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EXECUTIVE SUMMARY

Overview

The City of Washington, Illinois, in collaboration with the Hengst Foundation, has commissioned Terra Engineering and its partners—Epstein Architects, Hunden Strategies, Cummings, ARUP, and in consultation with CORE—to conduct a comprehensive feasibility study for a new outdoor performance venue in Central Illinois. Through the generous vision of Jim Hengst, honoring his late wife Dee, the DEE Amphitheater is envisioned as a world-class performance venue celebrating the arts.

Vision and Objectives

The feasibility study explores successful models of outdoor theaters nationwide and assesses the market to ensure the optimal size and business model for the amphitheater. Key considerations include market population, competing venues, and a thorough needs assessment to ensure the venue's long-term success.

Proposed Theater Development

The study explores varying design scenarios and amenities attributed to the venue. The primary design study assumes a target capacity of 5,000 spectators with options for 500 and 700 covered seats, 1,500 and 1,300 open air seats, and 3,000 lawn seating.

Long-Term Site Development and Design

The proposed design envisions a casual park setting with shade trees and lawns, creating a picnic-friendly environment for spectators. Accessible walking paths and wheelchair-ready seating areas ensure inclusivity. The amphitheater aims to foster a relaxing atmosphere during summer nights.

Infrastructure and Amenities

The venue will include ample concession vendor spaces and restroom facilities integrated into the theater's infrastructure. Parking for approximately 1,700 cars will be available, supporting not only the amphitheater's events but also special city events.

Conclusion

The DEE Amphitheater promises to be a significant cultural asset for Central Illinois, combining thoughtful design, market analysis, and community-oriented features to create a premier outdoor performance venue. The study's comprehensive approach ensures that the venue will meet the needs of the community while providing a sustainable and enjoyable experience for all visitors.

FEASIBILITY STUDY: WHAT INFLUENCES VIABILITY AND RECOMMENDATIONS



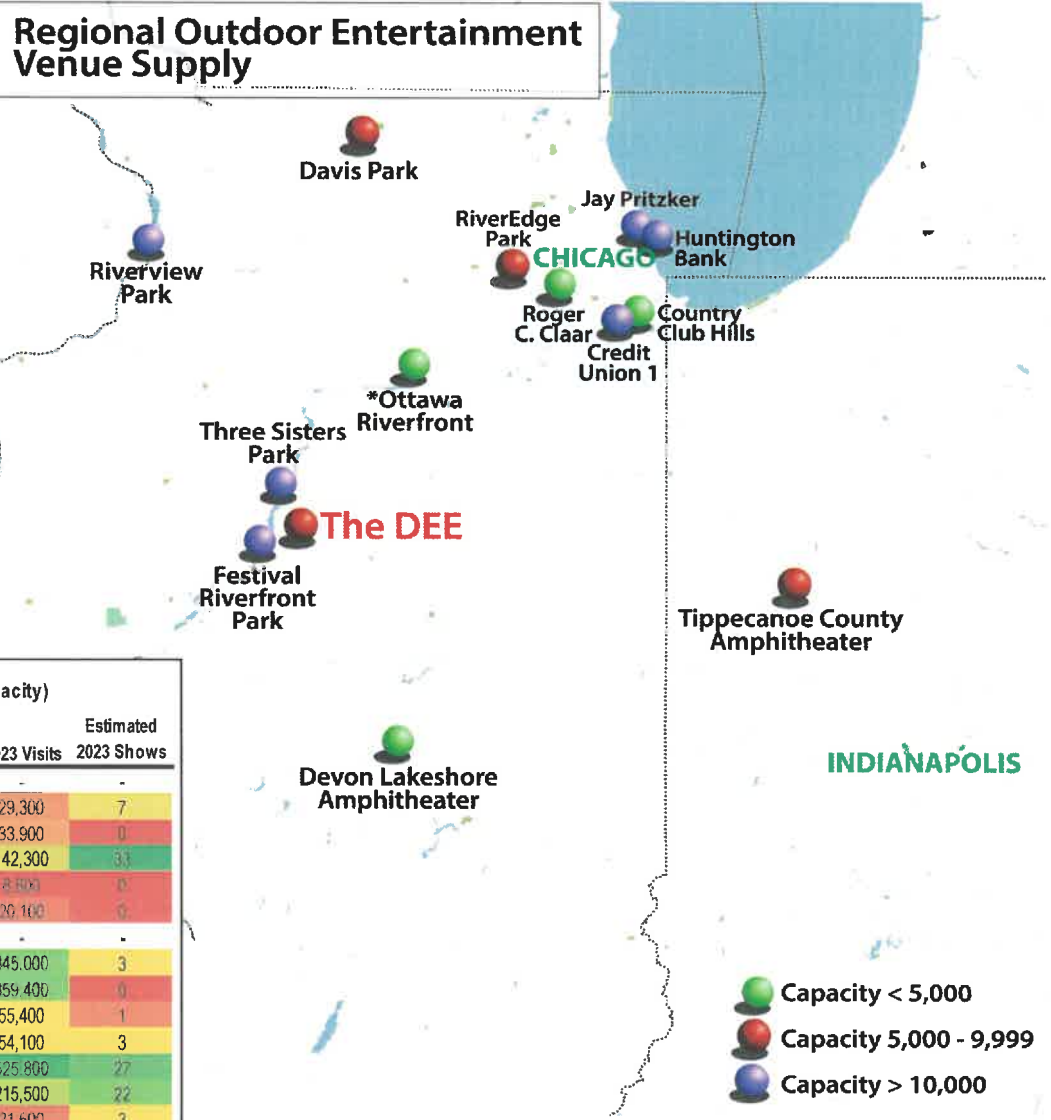
FEASIBILITY STUDY: SWOT OVERVIEW

The following SWOT analysis details the strengths, weaknesses, opportunities, and threats of the Project in Washington, IL.

<p>Strengths</p> <ul style="list-style-type: none"> Privately supported venue that will help to optimize management Boutique venue with event-caliber quality Optimal capacity based on industry input that provides a flexible capacity range for events 	<p>Weaknesses</p> <ul style="list-style-type: none"> Seasonality and weather restrictions Nonprimary concert market, based on industry input and market size Site challenges (zoning, pushback from neighbors, etc.) Limited support amenities with current site
<p>Opportunities</p> <ul style="list-style-type: none"> Leverage the limited market presence of event-caliber venues Strong third-party event promoter to optimize venue operations Strong anchor tenant to generate consistent activity Ancillary indoor or covered facility to generate year-round activity Highly responsive market for B-level country and classic rock artists 	<p>Threats</p> <ul style="list-style-type: none"> Potential cannibalization from Chicago market given that central Illinois is typically located within Chicago’s market radius Industry assumptions that residents are accustomed to driving to Chicago for concerts Weather uncertainties without indoor capabilities that could lead to lost business

FEASIBILITY STUDY: REGIONAL OUTDOOR VENUE SUPPLY

The largest node of regional outdoor venues are in the Chicago area which is reflective of its significant market size. Considering central Illinois' smaller market size, the Project must deliver a high-quality, competitive venue to distinguish itself in the market and successfully attract ticketed shows.



Venue	Location	Year Built	Total Capacity	Seating Capacity	2023 Visits	Estimated 2023 Shows
Ottawa Riverfront Amphitheater	Ottawa, IL	NEW	2,000	0	-	-
Country Club Hills Amphitheater	Country Club Hills, IL	2007	2,100	2,100	29,300	7
Roger C. Claar Performing Arts Center	Bolingbrook, IL	2007	3,000	0	33,900	0
The Devon Lakeshore Amphitheater	Decatur, IL	2018	3,400	360	142,300	33
Davis Park	Rockford, IL	1989	5,000	0	8,800	0
Tippecanoe County Amphitheater	West Lafayette, IN	1991	5,000	1,500	20,100	0
The DEE	Washington, IL	NEW	5,000	2,000	-	-
RiverEdge Park	Aurora, IL	2012	6,000	2,000	345,000	3
Jay Pritzker Pavilion	Chicago, IL	2004	11,000	4,000	359,400	0
Riverfront Festival Park	Peoria, IL	~2005	15,000	0	55,400	1
Three Sisters Park	Chillicothe, IL	1992	25,000	0	54,100	3
Credit Union 1 Amphitheater	Tinley Park, IL	1990	28,360	11,000	525,800	27
Huntington Bank Pavilion	Chicago, IL	2005	30,000	14,000	215,500	22
Riverview Park	Clinton, IA	1985	~15,000	0	21,600	3
Average		2000	11,322	2,689	150,933	8

Source: Polstar, Venue & CVB Websites (Some venues do not report all events on Polstar. True event data may be skewed or underestimated)

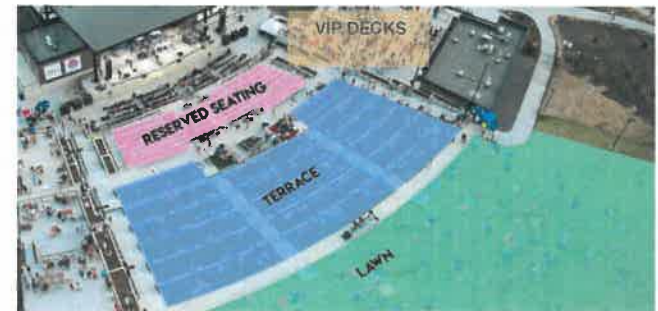
FEASABILITY STUDY: COMPETITIVE LANDSCAPE

Due to Chicago’s substantial market size, the Project would not compete with venues in the Chicago market. Instead, its competitive routing market will primarily be concentrated within central Illinois. When artists and promoters seek to book an outdoor venue in central Illinois, they will consider the venues that offer them with the optimal capacity and event caliber quality intended for their show. Given these considerations, Devon Lakeshore Amphitheater is essentially the only outdoor venue that will be competitive to the Project in attracting ticketed shows. Other venues within the routing market offer significantly different capacities or lack the event caliber quality that ultimately results in different programming natures.



The Devon Lakeshore Amphitheater opened with a generous donation from the Howard G. Buffet Foundation. The venue offers an area with reserved/fixed seating, VIP decks for premium seating options, and open terrace and lawn space.

- Location:** Decatur, IL
- Year Opened:** May 2019
- Owner/Operator:** Decatur Park District
- Capacity:** 3,400 (360 fixed seats)
- Cost:** \$4.25 million



FEASABILITY STUDY: DEVON LAKESHORE AMPHITHEATER EVENT SUMMARY

Hunden gathered event data for the Devon Lakeshore Amphitheater from Pollstar to provide insight into historical performance and event opportunities.

The top figure provides a summary of annual event performance at the Devon Lakeshore Amphitheater since its opening in 2019. In 2023, the Devon Lakeshore Amphitheater hosted 33 events, drawing an average attendance of approximately 2,700 per event. The data from the bottom figure provides insight into the top ten attended shows since 2020. The amphitheater has witnessed strong success with country artists, such as Riley Green, Elle King, and Jake Owen. Another prominent event category includes legacy rock artists such as the Goo Goo dolls, The Beach Boys, and Skid Row. These veteran acts often deliver nostalgic music experiences that particularly resonate with older generations.

Year	Number of Events	# of Events W/ Data	% Events Represented	Average Capacity	% of Available Tickets Sold	Average Attendance	Avg. Ticket Price
2023	33	6	18%	3,348	81%	2,713	\$40.97
2022	37	33	89%	3,200	52%	1,648	\$27.31
2021	21	0	0%	-	-	-	-
2020	0	0	-	-	-	-	-
2019	3	0	0%	-	-	-	-
Average	15	8	30%	3,200	52%	1,648	\$27.31

Source: Pollstar
*Some venues do not report all events. True event data may be skewed or underestimated.

Artist	Promoter	Year	Tickets Sold	% Sold	Ticket Price	Gross Revenue
Riley Green	In-House	2023	3,692	100%	\$50	\$148,392
Goo Goo Dolls	Mammoth	2023	3,571	100%	\$67	\$239,672
Elle King	In-House	2023	3,160	98%	\$34	\$86,590
The Beach Boys	Grandstand Concerts	2023	2,674	89%	\$58	\$156,334
Jake Owen	In-House, Grandstand Concerts	2022	2,489	75%	\$50	\$120,875
Brothers Osborne	In-House	2022	2,463	74%	\$53	\$123,195
"Live to Rock Tour", Skid Row, Warrant	In-House	2022	2,256	68%	\$38	\$62,250
TobyMac	In-House	2022	2,119	64%	\$55	\$111,020
Killer Queen Feat. Patrick Myers	In-House	2023	2,073	63%	\$32	\$51,430
Gary Allan	In-House, Mammoth	2022	2,066	66%	\$67	\$103,817
Average	-	-	2,656	80%	\$50	\$120,358

Source: Pollstar
*Event data is not available for all shows. Most attended shows may not be accurately reflected.

FEASABILITY STUDY: INTERVIEW FEEDBACK SUMMARY

Hunden interviewed executive representatives at several entertainment-based companies and venues in the regional area. The key takeaways from these conversations are below:

- Market Opportunity:** Central Illinois was mentioned to be a very underutilized market for concerts and shows. Several interviewees stated that there is strong market potential for outdoor entertainment acts in central Illinois, which has been proven by the Devon Lakeshore Amphitheater’s success in attracting quality acts. From a landscape perspective it is easy to route because it is directly in the middle of Chicago and St. Louis.
- Market Challenges:** Due to its proximity to Chicago, Peoria may lose out on opportunities to attract music acts since it is typically located within Chicago’s market radius. Furthermore, the Peoria Civic Center theater is a well-established venue that may pose competition for attracting acts who are looking to perform in Peoria. However, limitations stemming from the theater’s capacity and its management challenges will likely increase the amphitheater’s appeal.
- Venue Management:** Third-party promoters can really make or break whether a venue is successful, especially in smaller concert markets like Peoria. A private management company would be essential for the amphitheater, particularly a big-name promoter, to route artists through the venue during tours.
- Venue Recommendations:** All interviewees recommended a similar optimal capacity range between 4,500 – 5,000, including 2,000 – 2,500 fixed seats with the remaining being lawn seating.
- Annual Event Performance:** Interviewees estimated that an amphitheater in Peoria could support approximately 35– 40 annual events, including 10 – 15 promoted / ticketed shows with the remaining being community events.
- Ticketed Event Opportunities:** Central Illinois is a strong country and classic rock market. Therefore, the amphitheater’s main promoted event opportunities would involve B-level acts across those genres.



**Saint Louis
Music Park**

FEASIBILITY STUDY: PROJECT RECOMMENDATIONS

The adjacent table details the optimal scenario that Hunden recommends for the proposed entertainment venue based on promoter feedback and market demand.

Ample parking is required for any entertainment venue, but the amount greatly depends on the total capacity. Hunden assumed an industry average of approximately three people per car to estimate the recommended parking needed for venues of this size.

Premium seating is an industry trend that offers significant value to an entertainment venue and provides ample revenue streams for suites, loge boxes and VIP seats. It is recommended that roughly 20 percent, or 400 seats, of the 2,000 fixed seats are premium seating options. Support amenities onsite for the entertainment venue are recommended to include permanent concessions and permanent restrooms available for ticketed shows and community events. There are opportunities for the facility to be programmed by a third-party promoter for ticketed shows and a city partnership to supplement the schedule with community events throughout the year.

The DEE Amphitheater Recommendations - Washington, IL		
Feature	Unit Size	Unit
Entertainment Venue Recommendation		
Fixed Seats	2,000	Seats
General Admission (Lawn)	3,000	Capacity
Total Capacity	5,000	
Back-of-House	3,000	Square Feet
Support Amenities		
Permanent Concession/Food Service Area	500	Square Feet
Parking Spaces	1,667	Spaces
Green Room	300	Square Feet
Other Key Amenities:		Annual Programming
Storage		12 - 15 Ticketed Shows
Permanent Restrooms		10+ Community Events
Source: Hunden Partners		

FEASABILITY STUDY: EVENT PROJECTIONS

For the outdoor-only venue, Hunden estimates an average of 49 events each year at stabilization, attracting nearly 85,000 visitors annually.

Promoted concerts are expected to generate 12 annual events at stabilization with the highest average attendance rate of 3,700 patrons. Given the weather constraints, the event projections are conservative for promoted concerts. Hunden assumed the promoted concerts would primarily take place in the summer months from May through September based on promoter feedback and routing abilities.

The DEE Amphitheater Projections 5,000-Capacity Commerical Venue (Outdoor Only)	2026 Year 1	2027 Year 2	2028 Year 3	2029 Year 4	2030 Year 5	2031 Year 6	2032 Year 7	2033 Year 8	2034 Year 9	2035 Year 10
Events by Type										
Community Events	15	20	23	25	25	25	25	25	25	25
Peoria Symphony Orchestra	2	3	4	4	4	4	4	4	4	4
Weddings/Private Events	3	4	4	6	6	6	6	6	6	6
Promoted Concerts	9	11	12	12	12	12	12	12	12	12
Festivals	1	1	2	2	2	2	2	2	2	2
Total	30	39	45	49	49	49	49	49	49	49
Total Event Days	31	40	47	51	51	51	51	51	51	51
Average Attendance by Event Type										
Community Events	875	1,006	1,057	1,057	1,057	1,057	1,057	1,057	1,057	1,057
Peoria Symphony Orchestra	800	1,015	1,180	1,180	1,180	1,180	1,180	1,180	1,180	1,180
Weddings/Private Events	220	250	250	250	250	250	250	250	250	250
Promoted Concerts	3,000	3,400	3,700	3,700	3,700	3,700	3,700	3,700	3,700	3,700
Festivals	1,550	1,800	1,920	1,920	1,920	1,920	1,920	1,920	1,920	1,920
Total Visitation by Event Type										
Community Events	13,125	20,125	24,301	26,414	26,414	26,414	26,414	26,414	26,414	26,414
Peoria Symphony Orchestra	1,600	3,045	4,720	4,720	4,720	4,720	4,720	4,720	4,720	4,720
Weddings/Private Events	660	1,000	1,000	1,500	1,500	1,500	1,500	1,500	1,500	1,500
Promoted Concerts	27,000	37,400	44,400	44,400	44,400	44,400	44,400	44,400	44,400	44,400
Festivals	3,100	3,600	7,680	7,680	7,680	7,680	7,680	7,680	7,680	7,680
Total	45,485	65,170	82,101	84,714	84,714	84,714	84,714	84,714	84,714	84,714

Source: Hunden Partners

FEASABILITY STUDY: REVENUE AND EXPENSE SUMMARY

Hunden projects that annual revenues will outweigh operational expenses after the initial year. In year five, the venue is expected to achieve a net operating income of \$165,000. Hunden did assume a management fee as part of operational expenses in order to attract the top-talent acts.

Due to property tax expenses resulting in private land ownership, the venue is expected to operate at a negative profit once property tax payments are anticipated to begin in 2032.

The DEE Amphitheater Projections 5,000-Capacity Commerical Venue (Outdoor Only)	2026 Year 1	2027 Year 2	2028 Year 3	2029 Year 4	2030 Year 5	2031 Year 6	2032 Year 7	2033 Year 8	2034 Year 9	2035 Year 10
Revenues (\$000s)										
Rental Income	\$ 158	\$ 200	\$ 231	\$ 244	\$ 251	\$ 259	\$ 267	\$ 275	\$ 283	\$ 291
Expense Reimbursements	\$ 254	\$ 332	\$ 388	\$ 399	\$ 411	\$ 423	\$ 436	\$ 449	\$ 463	\$ 477
Gross Ticket Revenue 3%	\$ 41	\$ 61	\$ 78	\$ 81	\$ 83	\$ 86	\$ 88	\$ 91	\$ 94	\$ 97
Net Premium Seating Revenue 85%	\$ 98	\$ 101	\$ 104	\$ 107	\$ 111	\$ 114	\$ 117	\$ 121	\$ 124	\$ 128
Net Concessions/Catering	\$ 30	\$ 49	\$ 64	\$ 71	\$ 73	\$ 75	\$ 77	\$ 80	\$ 82	\$ 84
Merchandise Revenue 14%	\$ 49	\$ 69	\$ 87	\$ 89	\$ 92	\$ 95	\$ 98	\$ 100	\$ 103	\$ 107
Net Parking 42%	\$ 40	\$ 57	\$ 72	\$ 74	\$ 77	\$ 79	\$ 81	\$ 84	\$ 86	\$ 89
Net Naming Rights \$45	\$ 45	\$ 46	\$ 48	\$ 49	\$ 51	\$ 52	\$ 54	\$ 55	\$ 57	\$ 59
Advertising & Sponsorship (net) \$29	\$ 29	\$ 30	\$ 31	\$ 32	\$ 33	\$ 34	\$ 35	\$ 36	\$ 37	\$ 38
Ticket Rebate Revenue 70%	\$ 57	\$ 81	\$ 99	\$ 102	\$ 105	\$ 108	\$ 111	\$ 115	\$ 118	\$ 122
Facility Service Fee 85%	\$ 69	\$ 98	\$ 120	\$ 124	\$ 127	\$ 131	\$ 135	\$ 139	\$ 143	\$ 148
Partner Donations \$30	\$ 30	\$ 31	\$ 32	\$ 33	\$ 34	\$ 35	\$ 36	\$ 37	\$ 38	\$ 39
Other 1%	\$ 1	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 3	\$ 3	\$ 3	\$ 3
Total	\$ 901	\$ 1,156	\$ 1,356	\$ 1,408	\$ 1,450	\$ 1,493	\$ 1,538	\$ 1,584	\$ 1,632	\$ 1,681
Expenses (\$000s)										
Administration \$165	\$ 165	\$ 170	\$ 175	\$ 180	\$ 186	\$ 191	\$ 197	\$ 203	\$ 209	\$ 215
Event Expenses	\$ 254	\$ 332	\$ 388	\$ 399	\$ 411	\$ 423	\$ 436	\$ 449	\$ 463	\$ 477
Utilities \$88	\$ 88	\$ 91	\$ 93	\$ 96	\$ 99	\$ 102	\$ 105	\$ 108	\$ 111	\$ 115
Production, Undistributed \$130	\$ 130	\$ 134	\$ 138	\$ 142	\$ 146	\$ 151	\$ 155	\$ 160	\$ 165	\$ 170
Operations (repairs, maintenance, etc.) \$90	\$ 90	\$ 93	\$ 95	\$ 98	\$ 101	\$ 104	\$ 107	\$ 111	\$ 114	\$ 117
Insurance \$52	\$ 52	\$ 54	\$ 55	\$ 57	\$ 59	\$ 60	\$ 62	\$ 64	\$ 66	\$ 68
Advertising & Other \$65	\$ 65	\$ 67	\$ 69	\$ 71	\$ 73	\$ 75	\$ 78	\$ 80	\$ 82	\$ 85
Guest Services & Security \$72	\$ 72	\$ 74	\$ 76	\$ 79	\$ 81	\$ 83	\$ 86	\$ 89	\$ 91	\$ 94
Management Fee \$101	\$ 101	\$ 104	\$ 107	\$ 110	\$ 114	\$ 117	\$ 121	\$ 124	\$ 128	\$ 132
Property Tax	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 423	\$ 435	\$ 462	\$ 505
Other 1%	\$ 9	\$ 12	\$ 14	\$ 14	\$ 14	\$ 15	\$ 15	\$ 16	\$ 16	\$ 17
Total	\$ 1,026	\$ 1,129	\$ 1,211	\$ 1,247	\$ 1,284	\$ 1,323	\$ 1,785	\$ 1,839	\$ 1,907	\$ 1,994
Net Operating Income	\$ (125)	\$ 27	\$ 145	\$ 161	\$ 165	\$ 170	\$ (247)	\$ (255)	\$ (276)	\$ (313)

FEASABILITY STUDY: IMPACT INPUTS

To analyze impacts, Hunden differentiates visitors between daytrippers and overnighters. The need for separation stems from the variance in spending habits between the different visitor types.

With the outdoor-only venue, Hunden estimates 83 percent of visitors to be daytrippers. Of these daytrippers, an estimated 59 percent would be net new or recaptured to the market. These visitors would not have visited Washington if not for the Project (net new) or would have left the market to attend a concert or event outside of Washington (recaptured).

Overnighters are expected to comprise 17 percent of total visitors, of which 83 percent would be considered net new or recaptured. Hunden estimates the Project to generate 5,550 net new room nights within Washington by year five.

The DEE Amphitheater Projections		2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
5,000-Capacity Commerical Venue (Outdoor Only)		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Impact Inputs & Projections											
% and # Daytrips											
Community Events	95%	12,469	19,119	23,086	25,093	25,093	25,093	25,093	25,093	25,093	25,093
Peoria Symphony Orchestra	95%	1,520	2,893	4,484	4,484	4,484	4,484	4,484	4,484	4,484	4,484
Weddings/Private Events	80%	528	800	800	1,200	1,200	1,200	1,200	1,200	1,200	1,200
Promoted Concerts	80%	21,600	29,920	35,520	35,520	35,520	35,520	35,520	35,520	35,520	35,520
Festivals	70%	4,340	5,040	10,752	10,752	10,752	10,752	10,752	10,752	10,752	10,752
Total	83%	40,457	57,772	74,642	77,049	77,049	77,049	77,049	77,049	77,049	77,049
% Daytrips Net New to Washington (induced & recaptured)											
Community Events	20%	2,494	3,824	4,617	5,019	5,019	5,019	5,019	5,019	5,019	5,019
Peoria Symphony Orchestra	20%	304	579	897	897	897	897	897	897	897	897
Weddings/Private Events	60%	317	480	480	720	720	720	720	720	720	720
Promoted Concerts	80%	17,280	23,936	28,416	28,416	28,416	28,416	28,416	28,416	28,416	28,416
Festivals	80%	3,472	4,032	8,602	8,602	8,602	8,602	8,602	8,602	8,602	8,602
Total	59%	23,867	32,850	43,012	43,653	43,653	42,756	42,756	42,756	42,756	42,756
% and # Overnights (in hotels)											
Community Events	5%	656	1,006	1,215	1,321	1,321	1,321	1,321	1,321	1,321	1,321
Peoria Symphony Orchestra	5%	80	152	236	236	236	236	236	236	236	236
Weddings/Private Events	20%	132	200	200	300	300	300	300	300	300	300
Promoted Concerts	20%	5,400	7,480	8,880	8,880	8,880	8,880	8,880	8,880	8,880	8,880
Festivals	30%	1,860	2,160	4,608	4,608	4,608	4,608	4,608	4,608	4,608	4,608
Total	17%	8,128	10,999	15,139	15,345	15,345	15,345	15,345	15,345	15,345	15,345
% and # Overnights Net New											
Community Events	20%	131	201	243	264	264	264	264	264	264	264
Peoria Symphony Orchestra	20%	16	30	47	47	47	47	47	47	47	47
Weddings/Private Events	40%	53	80	80	120	120	120	120	120	120	120
Promoted Concerts	90%	4,860	6,732	7,992	7,992	7,992	7,992	7,992	7,992	7,992	7,992
Festivals	90%	1,674	1,944	4,147	4,147	4,147	4,147	4,147	4,147	4,147	4,147
Total	83%	6,734	8,988	12,509	12,571	12,571	12,571	12,571	12,571	12,571	12,571
Total NN RN Generated		Per Room									
Community Events	2.5	53	81	97	106	106	106	106	106	106	106
Peoria Symphony Orchestra	2.0	8	15	24	24	24	24	24	24	24	24
Weddings/Private Events	2.0	26	40	40	60	60	60	60	60	60	60
Promoted Concerts	2.2	2,209	3,060	3,633	3,633	3,633	3,633	3,633	3,633	3,633	3,633
Festivals	2.4	698	810	1,728	1,728	1,728	1,728	1,728	1,728	1,728	1,728
Total		2,993	4,006	5,522	5,550	5,550	5,550	5,550	5,550	5,550	5,550

Source: Hunden Partners

FEASIBILITY STUDY: IMPACT PROJECTIONS

As the Project attracts new visitors to Washington, these visits generate direct net new spending within the market. This direct spending leads to net new indirect and induced spending throughout the economy, supporting new earnings/jobs, as well as generating taxes.

Hunden estimates over 10 years the commercial venue would generate \$55 million in new direct spending, leading to \$86 million in total spending within the local economy. This new spending is estimated to generate \$37 million in net new earnings, supporting an average of 100 jobs each year upon stabilization.

Hunden estimated the property tax of the 20-acre parcel based on the average tax per acre for other nearby commercial sites, resulting in a total property tax revenue of \$1.8 million by year 10, assuming that the first year of property tax payments begin in 2032.

Direct, Indirect and Induced Net New Spending to Washington (\$000s) - 5,000-Capacity Commerical Venue (Outdoor Only)											
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	
Direct Spending											
Food & Beverage	\$ 971	\$ 1,426	\$ 1,933	\$ 2,024	\$ 2,085	\$ 2,131	\$ 2,195	\$ 2,261	\$ 2,329	\$ 2,399	\$ 19,754
Lodging	\$ 505	\$ 694	\$ 995	\$ 1,030	\$ 1,061	\$ 1,093	\$ 1,126	\$ 1,160	\$ 1,194	\$ 1,230	\$ 10,089
Retail	\$ 610	\$ 861	\$ 1,126	\$ 1,166	\$ 1,201	\$ 1,229	\$ 1,266	\$ 1,304	\$ 1,343	\$ 1,383	\$ 11,490
Transportation	\$ 615	\$ 866	\$ 1,175	\$ 1,222	\$ 1,259	\$ 1,281	\$ 1,320	\$ 1,359	\$ 1,400	\$ 1,442	\$ 11,941
Other	\$ 113	\$ 159	\$ 219	\$ 228	\$ 235	\$ 239	\$ 246	\$ 253	\$ 261	\$ 269	\$ 2,220
Total	\$ 2,814	\$ 4,006	\$ 5,448	\$ 5,671	\$ 5,842	\$ 5,973	\$ 6,152	\$ 6,337	\$ 6,527	\$ 6,723	\$ 55,494
Total Spending	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total
Direct	\$ 2,814	\$ 4,006	\$ 5,448	\$ 5,671	\$ 5,842	\$ 5,973	\$ 6,152	\$ 6,337	\$ 6,527	\$ 6,723	\$ 55,494
Indirect	\$ 1,129	\$ 1,606	\$ 2,181	\$ 2,270	\$ 2,338	\$ 2,391	\$ 2,462	\$ 2,536	\$ 2,612	\$ 2,691	\$ 22,216
Induced	\$ 539	\$ 767	\$ 1,041	\$ 1,084	\$ 1,116	\$ 1,140	\$ 1,175	\$ 1,210	\$ 1,246	\$ 1,284	\$ 10,601
Total	\$ 4,482	\$ 6,379	\$ 8,671	\$ 9,025	\$ 9,296	\$ 9,504	\$ 9,789	\$ 10,083	\$ 10,386	\$ 10,697	\$ 88,311

Source: Hunden Partners

Net New Earnings & FTE Jobs from Direct, Indirect & Induced Spending (\$000s) - 5,000-Capacity Commerical Venue (Outdoor Only)											
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	
Net New Earnings											
From Direct	\$ 1,239	\$ 1,765	\$ 2,398	\$ 2,496	\$ 2,571	\$ 2,628	\$ 2,707	\$ 2,788	\$ 2,872	\$ 2,958	\$ 24,421
From Indirect	\$ 428	\$ 606	\$ 829	\$ 862	\$ 888	\$ 909	\$ 937	\$ 965	\$ 994	\$ 1,023	\$ 8,440
From Induced	\$ 229	\$ 325	\$ 443	\$ 461	\$ 475	\$ 486	\$ 500	\$ 515	\$ 531	\$ 547	\$ 4,510
Total	\$ 1,896	\$ 2,696	\$ 3,669	\$ 3,819	\$ 3,934	\$ 4,023	\$ 4,143	\$ 4,268	\$ 4,396	\$ 4,528	\$ 37,371
Net New FTE Jobs											Average
From Direct	31	44	58	60	60	60	61	61	62	63	62
From Indirect	13	18	24	24	25	25	25	25	25	26	25
From Induced	6	9	12	12	12	12	12	12	13	13	13
Total	51	71	94	96	97	97	98	99	100	101	100

Source: Hunden Partners

Fiscal Impact - Tax Impacts from New District Spending (\$000s) - 5,000-Capacity Commerical Venue (Outdoor Only)											
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	Total
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	
Local Taxes											
City Sales Tax (2.25%)	\$ 63	\$ 90	\$ 123	\$ 128	\$ 131	\$ 134	\$ 138	\$ 143	\$ 147	\$ 151	\$ 1,249
County Sales Tax (0.5%)	\$ 14	\$ 20	\$ 27	\$ 28	\$ 29	\$ 30	\$ 31	\$ 32	\$ 33	\$ 34	\$ 277
County Hotel Tax (5.0%)	\$ 25	\$ 34	\$ 49	\$ 51	\$ 53	\$ 54	\$ 56	\$ 57	\$ 59	\$ 61	\$ 499
County Property Tax (Est.)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 423	\$ 435	\$ 462	\$ 505	\$ 1,824
Total	\$ 102	\$ 145	\$ 199	\$ 207	\$ 213	\$ 218	\$ 647	\$ 667	\$ 700	\$ 750	\$ 3,850

Source: Hunden Partners

FEASIBILITY STUDY: 10-YEAR IMPACTS

Over 10 years the outdoor venue is expected to generate:

- \$88 million in net new spending, including \$55 million in direct spending
- \$37 million in net new earnings, including \$24 million in direct earnings
- 101 net new full-time jobs, including 63 direct full-time jobs
- \$5.3 million in local taxes, including \$1.2 million in sales tax to the City

10-Year Impacts | Washington, IL 5,000-Capacity Commerical Venue (Outdoor Only)

Net New Spending	(millions)
Direct	\$55
Indirect	\$22
Induced	\$11
Total	\$88

Net New Earnings	(millions)
From Direct	\$24
From Indirect	\$8
From Induced	\$5
Total	\$37

Net New FTE Jobs	Actual
From Direct	63
From Indirect	26
From Induced	13
Total	101

Local Taxes	(millions)
City Sales Tax (2.25%)	\$1.2
County Sales Tax (0.5%)	\$0.3
County Hotel Tax (5.0%)	\$0.5
County Property Tax (Est.)	\$1.8
Total	\$5.3

Source: Hunden Partners

SITE MAP



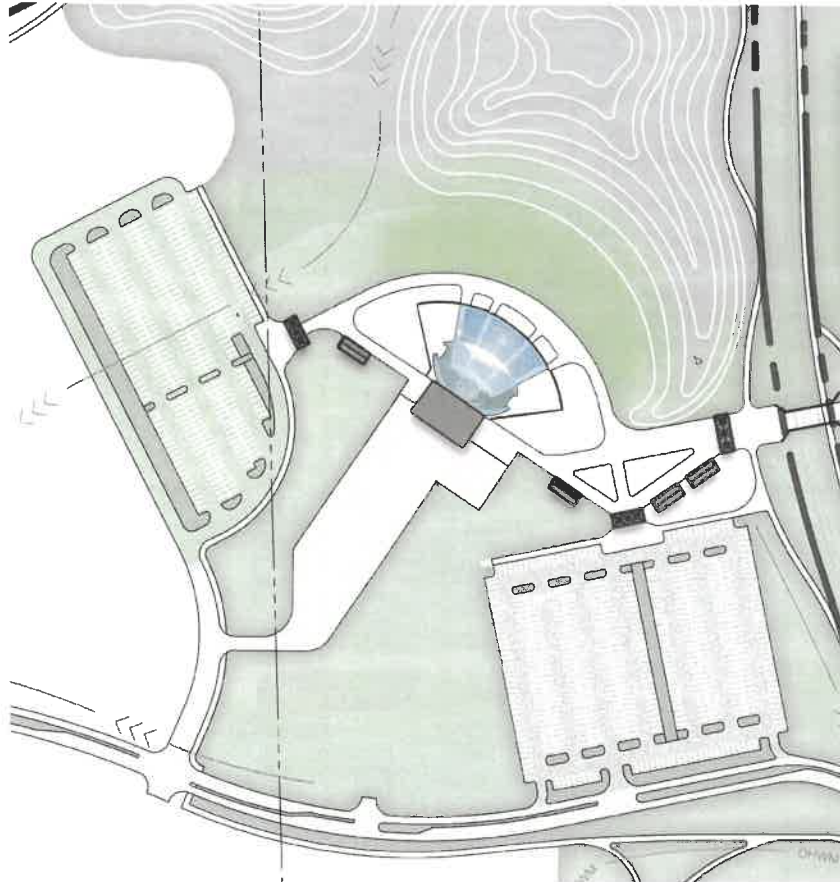
OVERALL PLAN



PROPOSED AMPHITHEATER

THE DEE CANOPY 11,000 SF CANOPY

700 COVERED SEATS, 1,300 OPEN AIR SEATS & 3,000 LAWN SEATS



PROPOSED AMPHITHEATER

THE DEE CANOPY 11,000 SF CANOPY

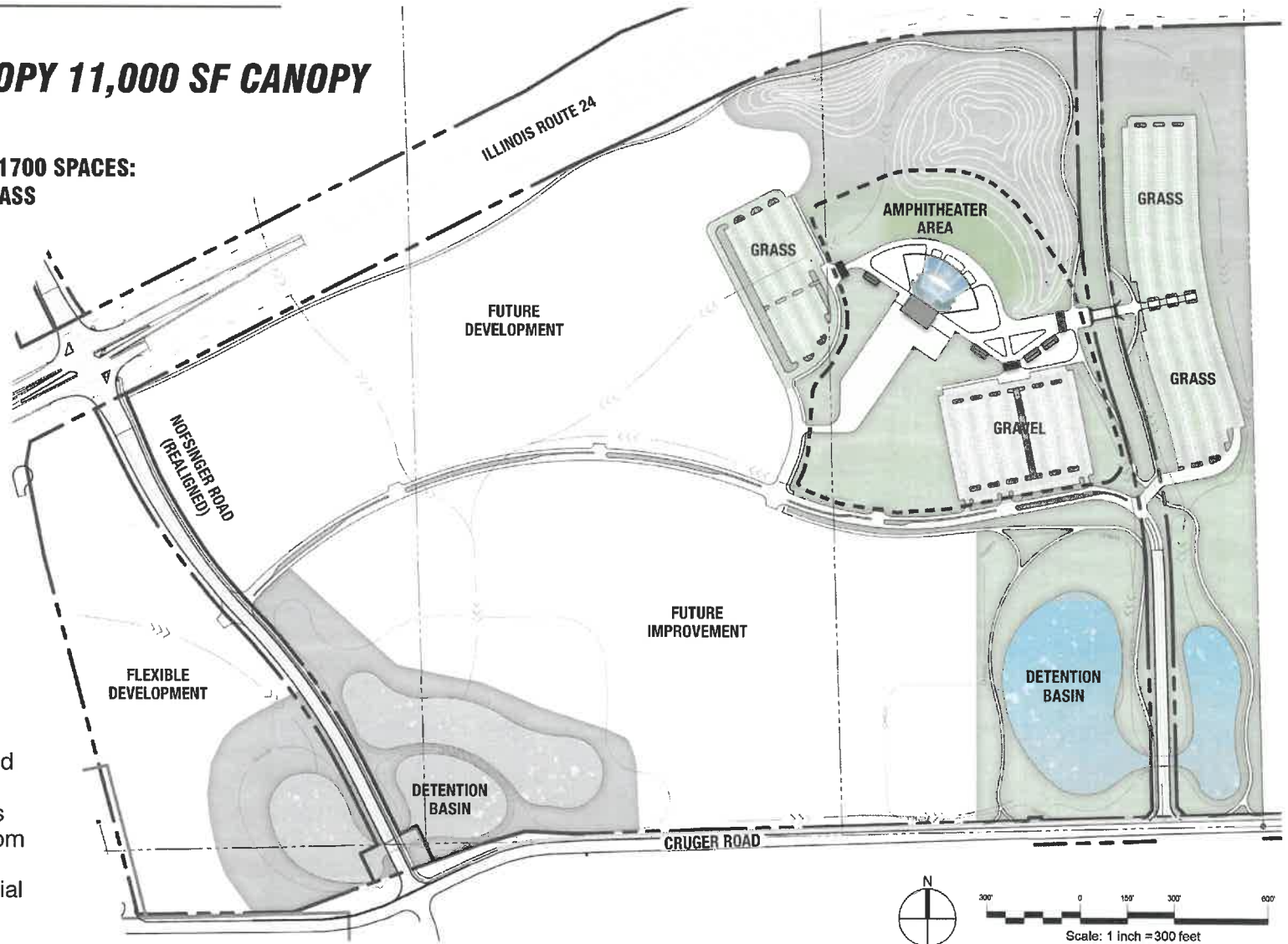
**PARKING PROVIDED - 1700 SPACES:
485 GRAVEL, 1215 GRASS**

**15.7 ACRES
STORMWATER
(6.4 AC WATER)**

**±13.5 ACRES
COMMUNITY
EVENTS SPACE**

Phase one of the comprehensive site plan, as highlighted in the figure to the right, includes the development of an amphitheater venue located near the top right of the site plan.

Some of the main challenges mentioned with the site include zoning restrictions as well as opposition from neighbors and the surrounding residential communities.



COSTING

THE DEE CANOPY 8,000 SF

500 COVERED SEATS, 1,500 OPEN AIR SEATS & 3,000 LAWN SEATS

SITWORK: \$2,000,000
 CONCESSIONS/RESTROOMS: \$2,000,000
 TENSILE STRUCTURE: \$2,500,000
 BOH BUILDING/STAGE: \$1,000,000
 THEATER EQUIPMENT: \$1,000,000
 CONTINGENCY: \$1,000,000
 ESC/SOFT COSTS (20%): \$1,780,000

SUBTOTAL: \$10,680,000

OTHER SCOPE:

PERMENANT AV/RIGGING: RENTED
 PERMENANT SEATING: \$100,000
 LANDSCAPING: REMOVED FROM BUDGET
 MASS GRADING/BERM AT NE CORNER:
 \$500,000
 UTILITIES/ROADS: CITY OPTIONS

TOTAL: \$11,280,000

THE DEE CANOPY 11,000 SF

700 COVERED SEATS, 1,300 OPEN AIR SEATS & 3,000 LAWN SEATS

SITWORK: \$2,000,000
 CONCESSIONS/RESTROOMS: \$2,000,000
 TENSILE STRUCTURE: \$3,000,000
 BOH BUILDING/STAGE: \$1,000,000
 THEATER EQUIPMENT (AV ONLY): \$400,000
 CONTINGENCY: \$500,000
 ESC/SOFT COSTS (20%): \$1,780,000

SUBTOTAL: \$10,680,000

OTHER SCOPE:

PERMENANT AV/RIGGING: RENTED
 PERMENANT SEATING: \$100,000
 LANDSCAPING: REMOVED FROM BUDGET
 MASS GRADING/BERM AT NE CORNER:
 \$500,000
 UTILITIES/ROADS: CITY OPTIONS

TOTAL: \$11,280,000



*SITE DEVELOPMENT OPTION 1 CONSISTS OF: 485 GRAVEL PARKING SPACES, 1,215 GRASS PARKING SPACES, 15.7 ACRES STORMWATER (6.4 ACRES WATER), ±13.5 ACRES COMMUNITY EVENTS SPACE.

***ALL UTILITY CONNECTIONS TO THE AMPHITHEATER SITE AND ALL DEVELOPMENT DRIVES / ROADWAY CONNECTIONS FROM AMPHITHEATER PARKING AREAS TO CRUGER AND NOFSINGER ROAD BY CITY AND NOT INCLUDED.

TRAFFIC IMPACT

The potential traffic impacts of the proposed 5,000 seat amphitheater to be located along US 24 in Washington, Illinois. The proposed location is to provide approximately 1,500 parking spaces near the site for patrons. The access to the parking area will be from the south via a new connection to Cruger Road and from the west along a new road to be constructed which will connect to the newly relocated Nofsinger Road. Visitors will be able to use Main Street to Cruger from the East and Nofsinger Road from US 24 on the west side, while other connections are available directly into Washington, IL to the south via Main Street, Dallas Rd and Cummings Ln.

Typically, when projecting traffic to a newly proposed site to be constructed, traffic engineers rely on the Trip Generation Manual published by the Institute of Transportation Engineers (ITE) for estimating new trips. This manual uses data collected from other similar sites based on known independent variables such as size of the building, number of employees, etc. The ITE manual does not have a land use code for an amphitheater as this is not a use which has been widely studied. A review of the types of land use codes available in the manual it was determined that the amphitheater would fall into the category of recreational uses and based on the information which was available it was

Movie Theater (445)

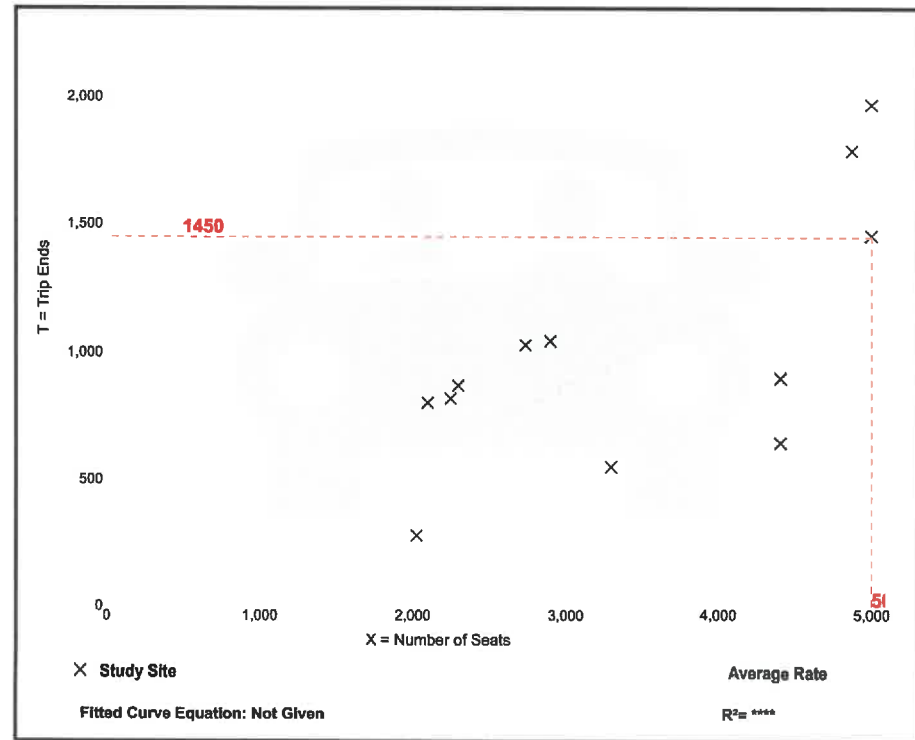
Vehicle Trip Ends vs: Seats
On a: Friday,
PM Peak Hour of Generator

Setting/Location: General Urban/Suburban
 Number of Studies: 12
 Avg. Num. of Seats: 3442
 Directional Distribution: 59% entering, 41% exiting

Vehicle Trip Generation per Seat

Average Rate	Range of Rates	Standard Deviation
0.29	0.14 - 0.39	0.10

Data Plot and Equation



Trip Gen Manual, 11th Edition

• Institute of Transportation Engineers

determined that selecting the land use of movie theater might be the most similar land use code available.

The Movie Theater (Land Use Code 445) provides estimates of trips based on the number of seats provided in the theater. The amphitheater capacity of 5,000 seats was used with the calculation information for movie theater to estimate the number of vehicle trips created by the amphitheater. The calculations were done using the data for both the peak hour of trips generated by a movie theater on a Friday and Saturday night to determine the peak trips. The Friday calculations estimated 1,450 vehicle trips and the Saturday peak estimated 1,571 trips. Based on the results it was determined that the Saturday data would be used for estimating the impact of the amphitheater.

It was assumed that the 1,571 vehicles in the peak hour would be disbursed in different direction upon leaving the parking lot with 50-60% continuing south to Cruger Road and then traveling east to Main to head north of south or traveling west to Nofsinger, Dallas or Cummings to head further south or west. It would be expected the remaining 40-50% would use the new access drive to Nofsinger to access US 24 and would then travel east or west from there. Using personnel to help direct traffic out of the site into the roadway network could assist in the management of traffic.

Movie Theater (445)

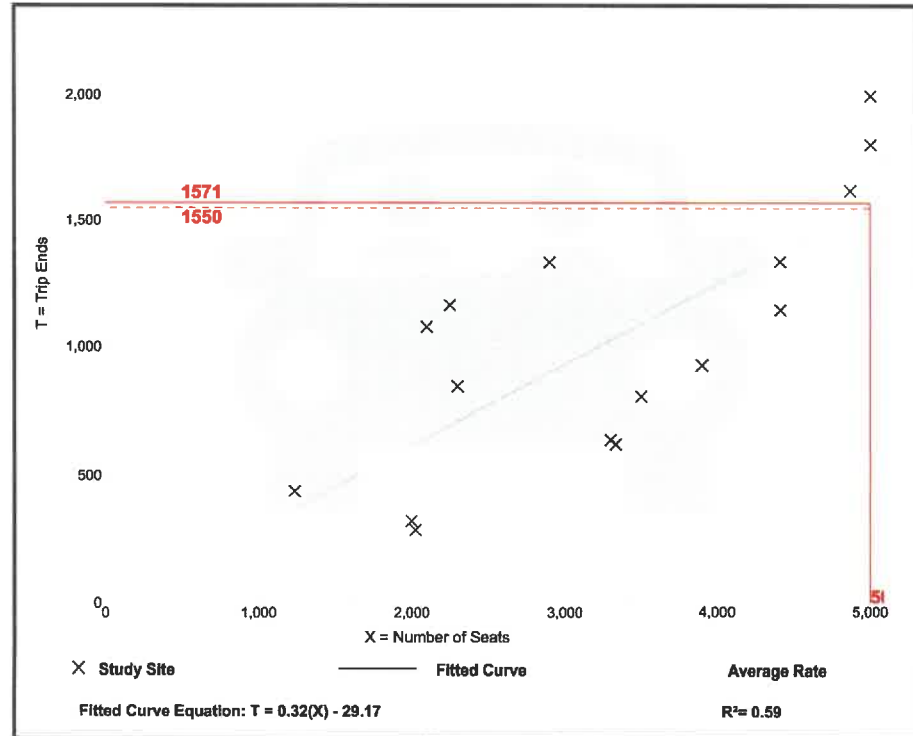
Vehicle Trip Ends vs: **Seats**
On a: **Saturday, Peak Hour of Generator**

Setting/Location: **General Urban/Suburban**
Number of Studies: 16
Avg. Num. of Seats: 3284
Directional Distribution: 52% entering, 48% exiting

Vehicle Trip Generation per Seat

Average Rate	Range of Rates	Standard Deviation
0.31	0.14 - 0.52	0.11

Data Plot and Equation



Trip Gen Manual, 11th Edition

• Institute of Transportation Engineers

ACOUSTIC FEASIBILITY STUDY

ARUP

Acoustics Introduction

Arup is providing a feasibility study for the future Dee Amphitheater proposed to be located in Washington, IL. Our scope includes a review of the local noise code, review of amplified sound from the amphitheater and strategies for control of site noise. This document provides our preliminary review.

Table of Contents

- Noise Codes
- Projected Amplified Sound Levels
- Potential Sound Attenuation Options



Noise Codes

ARUP

Noise Codes

Code of Ordinances 2017 – Washington IL, § 154.106 Performance Standard

Noise.

(1) Application of noise performance standards. Any use established in an Industrial District shall be so operated as to comply with the performance standards governing noise set forth hereinafter for the district in which such use shall be located. No use already established on the effective date of this section shall be so altered or modified as to conflict with or further conflict with the performance standards governing noise established hereinafter for the district in which such use is located. Objectionable sounds of an intermittent nature shall be controlled so as not to become a nuisance to adjacent use. All uses, existing or proposed, shall be operated in conformance with the applicable requirements embodied in ZONING CODE CHAPTER 154 Code of Ordinances, Washington, Illinois - 969 - the regulations of the Illinois Administrative Code, Title 35 - Environmental Protection, Subtitle H - Noise Pollution, as amended from time to time.

(2) Method of measurements of noise level. Sound measured with a sound level meter and associated octave band filter, manufactured in compliance with standards described by the American Standards Association. Measurement shall be made using the flat network of the sound level meter. Impulsive type noises shall be subject to the performance standards hereinafter prescribed provided that such noises shall be capable of being accurately measured with such equipment. Noises capable of being so measured shall be those noises which cause rapid fluctuations of the needle of the sound level meter with a variation of no more than plus or minimum two (2) decibels. Noises incapable of being so measured, such as those of an irregular and intermittent nature, shall be controlled so as not to become a nuisance to adjacent uses.

(3) Limitations on noise levels: Noise in I-1 and I-2 District. At no point on the boundary of a residence or business district shall the sound intensity level of any individual operation or plant (other than the operation of motor vehicles or other transportation facilities) exceed the decibel levels in the designated octave bands shown in Table 1 set forth hereinafter for districts indicated:

Noise Codes

Code of Ordinances 2017 – Washington IL, § 154.106
 Performance Standard

Table 1

Octave Band (Cycles per second)*	All Residential Districts in dB	B1, B2, and B3 in dB
37.5 to 75	58	73
75.5 to 150	54	69
150 to 300	50	65
300 to 600	46	61
600 to 1200	40	55
1200 to 2400	33	48
2400 to 4800	26	41
Over 4800	20	35

*Typically, instead of a range the octave bands will be presented as center frequencies

(4) Method of measurement. Measurement is to be made at the nearest boundary of the nearest residential area or at any other point along the boundary where the level is higher. The sound levels shall be measured with a sound level meter and associated octave band filter as prescribed by the American Standards Association.

Noise Codes

Illinois Administrative Code 2018 Title 35 - Environmental Protection, Subtitle H - Noise Pollution

SUBTITLE H: NOISE
CHAPTER I: POLLUTION CONTROL BOARD
PART 901
SOUND EMISSION STANDARDS AND LIMITATIONS FOR PROPERTY LINE-NOISE-SOURCES

Section 901.102 Sound Emitted to Class A Land

- a) Except as elsewhere provided in this Part, a person must not cause or allow the emission of sound during daytime hours from any property-line noise source located on any Class A, B or C land to any receiving Class A land that exceeds any allowable octave band sound pressure level specified in the following table, when measured at any point within the receiving Class A land. Sound pressure levels must be measured at least 25 feet from the property-line noise source.

- b) Except as provided elsewhere in this Part, person must not cause or allow the emission of sound during nighttime hours from any property-line noise source located on any Class A, B or C land to any receiving Class A land that exceeds any allowable octave band sound pressure level specified in the following table, when measured at any point within the receiving Class A land. Sound pressure levels must be measured at least 25 feet from the property-line noise source.

Note that “daytime” levels are defined as 7:00 AM to 10:00 PM in the state code. Bold emphasis is added to the daytime sound pressure limits for “Class B Land”, applicable to sports/entertainment noise sources.

Noise Codes

Illinois Administrative Code 2018
 Title 35 - Environmental Protection, Subtitle H - Noise Pollution

Daytime Hours

Octave Band Center Frequency (Hz)	Allowable Octave Band Sound Pressure Levels (dB) of Sound Emitted to any Receiving Class A Land from		
	Class C Land	Class B Land	Class A Land
31.5	75	72	72
63	74	71	71
125	69	65	65
250	64	57	57
500	58	51	51
1000	52	45	45
2000	47	39	39
4000	43	34	34
8000	40	32	32

Noise Codes

Illinois Administrative Code 2018
 Title 35 - Environmental Protection, Subtitle H - Noise Pollution

Nighttime Hours

Octave Band Center Frequency (Hz)	Allowable Octave Band Sound Pressure Levels (dB) of Sound Emitted to any Receiving Class A Land from		
	Class C Land	Class B Land	Class A Land
31.5	69	63	63
63	67	61	61
125	62	55	55
250	54	47	47
500	47	40	40
1000	41	35	35
2000	36	30	30
4000	32	25	25
8000	32	25	25

Projected Amplified Sound Levels

ARUP

Projected Amplified Sound Levels

The closest residential property line to the new Dee amphitheater is approximately 1930-ft to the South based on the results shown from Google Earth as shown in Figure 1.

There is also a residential property line approximately 3260-ft to the West.

There is a House of Worship approximately 2,360-ft to the Northeast and another residential property line approximately 3,600-ft to the East, to the rear of the Amphitheater.

For the purposes of this preliminary study we have projected amplified sound levels to the closest residential neighborhood property lines identified as A and B in Figure 1.

It is anticipated that large rock/pop concert events will potentially be the loudest hosted events at the Washington Amphitheater and will result in the greatest noise impact on properties in the vicinity. We have used a recently measured rock/pop sound level from an outdoor venue from Arup. These levels are 107 dBA L_{eq} (average sound level, A-weighted) and 125 dBA L_{max} (maximum sound level, A-weighted). The spectrum is shown in Appendix A.



Figure 1 – Distance from Proposed Amphitheater to Nearby Properties

Projected Amplified Sound Levels

Location A

The Washington IL and State of IL Noise Codes do not specify duration of measurement or whether L_{eq} or L_{max} should be used to quantify the noise level. Therefore, we have projected typical rock/pop sound L_{eq} and L_{max} levels to the closest residential property lines to the venue. The L_{max} levels are typically 10-15 dB higher at all frequencies than the L_{eq} . Max levels should be considered as peak, transient sound events.

The Noise Code Limits are shown by dashed lines in the graph to the right.

Figure 2 shows amplified sound levels projected to the closest residential property line, Location A at 1930 feet. The red solid lines show L_{max} and L_{eq} levels compared to the applicable Noise Codes for Washington, IL and the State of IL.

Location A will be above all the noise limits whether L_{eq} or L_{max} is used and additional attenuation options must be investigated.

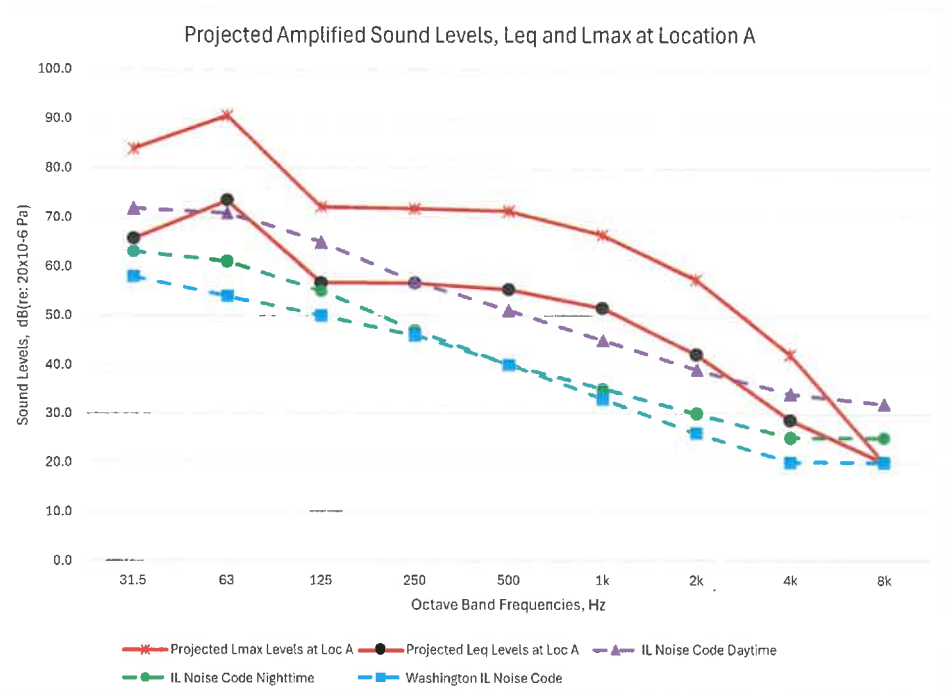


Figure 2: Projected Amplified Sound Levels (L_{eq} and L_{max}) at Loc. A 1930 ft vs Applicable Noise Codes

Projected Amplified Sound Levels

Location B

Figure 3 shows amplified sound levels projected to the further residential property line, Location B at 3200 feet. The red solid lines show L_{max} and L_{eq} levels compared to the applicable Noise Codes for Washington, IL and the State of IL.

Location B is above the Washington, IL Noise Code and State of IL Code for Nighttime levels. The L_{eq} levels however, do meet the State of IL Noise Code for Daytime levels at this projected distance.

Distance alone will not attenuate levels to what is needed to meet the Washington IL Noise Code and other attenuation options must be investigated.

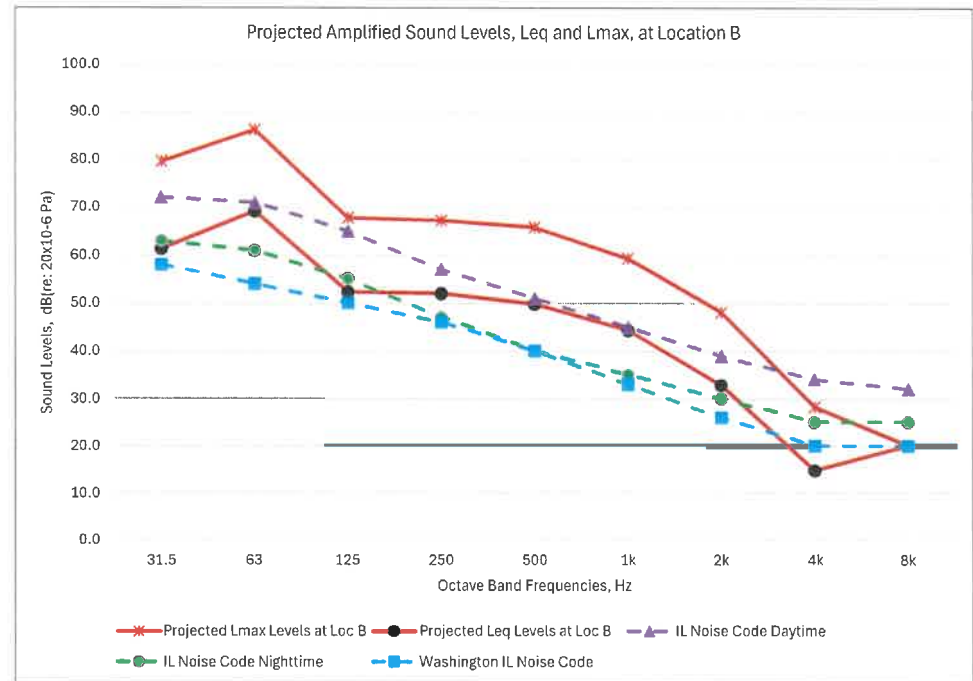


Figure 3: Projected Amplified Sound Levels (L_{eq} and L_{max}) at Loc. B: 3200 ft vs Applicable Noise Codes

Projected Amplified Sound Levels

Figure 4 at the right shows a Sound Level Contour map to identify the projected L_{eq} sound levels calculated in this report.



Figure 4: Sound Level Contour Map of Projected Sound Levels from Amphitheater to Neighboring properties

Sound Attenuation Options

ARUP

Sound Attenuation Options

The current orientation of the Amphitheater and typical Pop-Rock sound levels will not meet the Washington, Illinois or State of Illinois Daytime and Nighttime Code Levels at the nearest residential property lines. As part of our Concept Design report, we will review with the design team a combination of mitigation options, which could include:

- Topography that puts the stage into a bowl to reduce the line of sight to nearby residences
- Orientation of the Amphitheater
- Berms or landscaping
- Optimized or Distributed House Sound System

Amplified Rock/Pop Concert Sound Levels

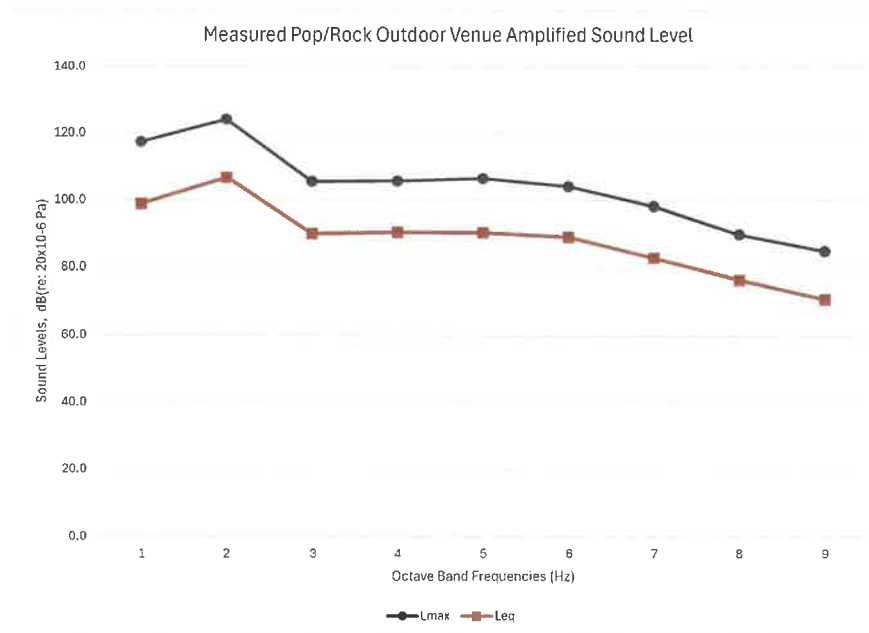


Figure A: Amplified Rock/Pop sound levels, L_{max} and L_{eq}, used for calculated sound

DEE AMPHITHEATER AND PAVILION AT NEW HARMONY PARK

