

MEMORANDUM

To: Steven Himes
Northwestern University

From: Peter Lemmon, P.E., PTOE
Kimley-Horn and Associates, Inc.

Date: January 24, 2023

Subject: Ryan Field Redevelopment
Transportation and Parking Management for Concert Events
Evanston, Illinois

Introduction

Kimley-Horn and Associates, Inc., (Kimley-Horn) was retained by Northwestern University to assess current multimodal transportation conditions at Ryan Field for college football game days and evaluate anticipated transportation and parking conditions associated with a proposed new event type at Ryan Field – concerts.

This memorandum outlines key transportation characteristics associated with concert events, highlights considerations for transportation and parking management for such events at the proposed Ryan Field redevelopment and summarizes elements and strategies to appropriately manage the arrival and departure of concert attendees using a range of transportation modes.

Proposed Plan

Attendance Capacity

The proposed Ryan Field redevelopment plan includes a spectator capacity of approximately 35,000 for football games. Due to the placement of the stage and supporting infrastructure, the capacity for concert events is planned for up to 28,500 attendees. The proposed concert capacity is 20 percent less than the proposed seating capacity for football games and represents a 40 percent reduction from the current 47,000 capacity of Ryan Field.

Days and Times of Events

Concert events at Ryan Field are expected to occur primarily during weekend evenings. The event times and durations will vary by number of acts and characteristics of the acts themselves.

Parking

Parking would be provided via a mix of both on and off-site lots and garages. On-site parking in the east and west lots at Ryan Field will include just under 1,400 spaces. Off-site parking can be provided for concert events at several locations accessible via foot, shuttle, and train. In closest proximity, Canal Shores represents an opportunity for off-site parking that is within a short walk of the venue. Since the Ryan Field

concert season is expected to be focused in relatively warmer months (May-October), Canal Shores will be generally be in the midst of golf season and may be unavailable at times.

Off-site parking will also be available at garages and surface lots on Northwestern University's campus with access to Ryan Field via a shuttle system, similar to college football game days. Downtown Evanston also provides multiple options for garage parking with the stadium accessible via a shuttle system, as currently operated for game days, or rail most likely using the CTA Purple Line over Metra due to frequency of trains.

Collectively, these on-site and off-site parking options are expected to serve the anticipated parking needs for concert events.

Concert Transportation Characteristics

Attendees of concert events exhibit different transportation characteristics than those attending college football games. However, characteristics also differ between acts due to different demographics. For example, the attendees of one act may use more inclined to ride transit while attendees of another act may skew more towards driving and parking. Attendees for different acts at the same venue may also be more likely to carpool with more people in the car than another act.

Although there are variations in key transportation characteristics across acts and even the day of the week, the following outlines general assumptions for key transportation characteristics at a venue such as Ryan Field.

Transit Use

The percentage of attendees that use transit, primarily Metra and CTA Rail, is expected to range between 30 and 65 percent. This range is dependent on the acts and their associated demographics. Ryan Field is easily accessible via two different rail lines within a short walk (less than 1,900 feet).

Vehicle Occupancy

For those that travel to/from concert venues by car, an important metric is the average number of attendees per vehicle. The higher the average vehicle occupancy is, the fewer cars there are on the road and the fewer parking spaces are needed to accommodate concert attendees. For many concerts, a common average occupancy ranges from 2.5 to 2.75 people per car; however, some concerts experience higher occupancies ranging between 3.0 and 3.4 people per car. While attendee demographics would influence the likeliness for the number of people that ride together for a show, other factors can also influence this characteristic, such as parking pricing – higher prices generally encourage attendees to ride together and reduce the cost to attend a show.

Rideshare

Compared to football games, concerts tend to experience higher levels of using rideshare or Transportation Network Companies (TNCs) such as Uber and Lyft. Data collected at other major concert venues located in urban environments suggest that approximately 8 to 10 percent of attendees use taxi and rideshare options to get to and from the event.

Walking / Biking

Walking and biking typically represent relatively low percentages of an attendee's primary transportation mode choice getting to and from concerts. While many concert-goers will be walking in the vicinity of an event and the venue and routes leading to/from should be designed to accommodate high levels of

pedestrian activity, walking is often paired with other primary modes such as parking in an off-site lot or walking to/from a transit station.

From a bicycle standpoint, the associated mode share is relatively low (1 to 2 percent). However, many attendees that live in Evanston, Wilmette, and other nearby communities and neighborhoods may ride a bike to a concert and require places to securely park or store their bicycle during the concert. Additional options for shared active transportation, such as a Divvy station, should also be considered.

Distribution of Arrivals and Departures

Similar to football games, not all attendees of a concert arrive and depart at the same time or within the peak hour immediately before and after an event. The distribution of concert traffic is spread out over multiple hours with arrivals being less concentrated before an event than departures following an event, but in both cases, traffic is spread beyond the peak hour.

Before a concert, some attendees arrive to the venue area early, prior to the peak hour, to grab dinner or drinks. Typically, concerts have opening acts that some attendees want to see while others will arrive at some point during the opening act and yet others will miss the opening act entirely and arrive just to watch the main act. The day of the week can also contribute to the peak hour distribution of arrivals as attendees of weekday evening events may have to coordinate with their work schedules. Based on data collected at other concerts, between 50 and 70 percent of arrivals occur during the peak hour prior to a concert event.

While traffic for football games is also not concentrated in the hour before an event, its traffic typically starts earlier (3-4 hours prior to kick-off) with tailgating, resulting in longer event-related traffic conditions. In contrast, tailgating is not permitted for concerts and event traffic conditions is not spread out over a significant portion of the day.

Following a show, concert departure traffic is more concentrated than arrivals. Yet, approximately 10 to 15 percent of traffic departs outside of the peak hour. Some attendees may leave early to beat the rush and others may wait while patronizing nearby restaurants/bars before heading home. Also worth noting is that concert departure traffic occurs late in the evening when ambient traffic volumes on the streets are significantly lower than during daytime and pre-event periods. In contrast, exiting traffic for daytime football games occurs with higher levels of ambient traffic activity.

Site Evaluation

Based on key transportation characteristics associated with concert events, the following section summarizes an evaluation of Ryan Field and the surrounding area relative to how these characteristics apply to potential concerts at this venue.

Transit Access

Concert venues with adjacent or close proximity to convenient transit options (particularly rail transit) benefit greatly by providing opportunities to access the event without dealing with traffic and parking. Venues with such transit options require fewer parking spaces and generate less traffic than those without transit access. Consider local venues such as Ravinia in Highland Park and Wrigley Field in Chicago. Ravinia maintains an adjacent Metra station on the Union Pacific North Line. Wrigley Field leverages the CTA's Red Line station at Addison to provide a major access option for a similarly sized venue without significant parking options nearby.

Ryan Field is uniquely positioned among Chicago-area concert venues to take advantage of two separate train options with Metra's Central Street Station on the Union Pacific North Line located approximately 1,500 feet west of Ryan Field and the CTA's Central Street Purple Line station located just under 1,900 feet to the east. Both rail stations are a short walk from Ryan Field and would be expected to draw a significant mode share for concert attendees.

Parking

Multiple parking options are available to serve a concert's parking needs. The parking on site combined with a range of off-site locations helps to distribute associated traffic both spatially and over time, thus helping to limit traffic impacts across the street network. Just under 1,400 spaces will be available at Ryan Field's west and east parking lots. Canal Shores Golf Club, similar to football games (but without tailgating) may be available for concert event parking that is easily walkable to the venue.

Off-site garage parking is available on campus at the North Campus Parking Garage near Ryan Field House and at the South Campus Parking Garage near the Segal Visitors Center and the University's Sailing Center. Additional surface lots on campus will also be available. These campus parking locations will have significant capacity during the concert season at Ryan Field as events will primarily occur in the evenings (when campus visitor, student, faculty, and staff parking needs are low) and during the late spring-to-early fall season (when students are away for summer break during much of the season). The campus parking garages and lots would be served by free shuttles, similar to the system in place for football games at Ryan Field.

Downtown Evanston is another area for off-site parking including the Maple Street Garage, Church Street Garage, and Sherman Plaza Garage. Attendees using these garages can then access Ryan Field using shuttles (also similar to current football games at Ryan Field) or the Chicago Transit Authority's Purple Line. Downtown parking could also be promoted in tandem with pre-event dining options for concert-goers to support activity in the downtown.

Active Management of Traffic

Evanston Police and Northwestern University are familiar and experienced with special event traffic and parking at Ryan Field. This experience and lessons learned over years of football games are valuable in properly managing the traffic and pedestrian conditions in the hours leading up to and immediately following events at Ryan Field. Active management by police and other traffic control personnel includes directing traffic, assisting pedestrians at intersections and other key crossing locations, manually controlling traffic signals during peak periods to flush queues and address congestion, and to clear paths for emergency vehicles.

Transportation Management Strategies

In conjunction with an updated transportation management plan that will be prepared in advance of football games at the new Ryan Field, strategies that may be enacted to manage multimodal transportation and parking for evening concerts are outlined below.

On and Off-Site Parking

Using a combination of both on-site and off-site parking options will accommodate parking needs for a range of concert events while distributing traffic across the City's street network and access routes. This approach helps to reduce congestion and a concentration of traffic in the area surrounding Ryan Field.

Shuttle Service for Off-Site Parking

Consistent with football game days, a free shuttle service will provide access between off-site parking locations on Northwestern University's campus and Downtown Evanston. Designated routes and passenger loading areas would be defined as part of a transportation management plan coordinated with the City.

Personalized Transportation Communications

In conjunction with ticket and parking purchases, customized transportation options can be developed and communicated with event ticket holders. Based on the location of pre-purchased parking and ticketholder zip codes, personalized travel routes can be provided to attendees via e-mail and text which helps to direct along preferred routes and limit unnecessary circulation of traffic in the area. Options for transit and other means of access can also be promoted and communicated to ticketholders.

Neighborhood Access and Parking Restrictions

During football games at Ryan Field, a portion of off-site parking occurs in surrounding neighborhoods, both on the street and on private property, sold by residents and businesses. Concert events represent a new use at Ryan Field and are expected to primarily occur on weekend evenings. For typical concerts in other locations, these times are considered to be in conflict with resident parking in the adjacent neighborhoods that rely on street parking after they come home from work or activities in the evening. Additionally, for other concert venues, traffic circulating through neighborhood street in search of parking is not desirable in evenings.

In contrast, events at Ryan Field do not rely on the surrounding neighborhoods to provide parking capacity. Given this and the concerns of neighbors regarding parking and traffic circulation, access and parking restrictions could be employed to limit access to only residents during concert events. This could be handled passively through permitting, signing, enforcement, and significantly increased fines for event dates or actively with temporary traffic barricades/cones/signs and traffic control personnel that restrict access and neighborhood streets. Residents could be given temporary visitor parking permits that could be used for guests on event dates. If desirable, details of this strategy would be developed in coordination with the City, elected officials, Evanston Police, and neighborhood residents.

On-Going Community Engagement

Transportation management plans should be considered living documents that should be assessed and updated over time as conditions evolve and lessons are learned from experience. To assist in the plan updates, Northwestern plans to establish a community advisory council to review the transportation and parking conditions associated with concerts and other events at Ryan Field, review the effectiveness of the plan's strategies, identify areas that should be addressed due to changing conditions, and explore measures to incorporate into the plan. Together with University representatives and City staff, this group should meet periodically to review conditions over the past season and prepare for the upcoming season (e.g., late fall after the concert and football seasons and in the spring before the start of the concert season). The University, community, and City can consider the details for such on-going community engagement.

Transit Fare Programs

In 2021, Metra started a successful arrangement with Ravinia to provide rides to/from concerts without purchasing a separate Metra ticket. Riders show their event tickets and ride for free. From initial discussions, this program has been considered successful for both entities. A similar program can be explored in conjunction with Metra for concert events to further incentivize Metra as an attractive option to

travel to/from Ryan Field for concerts. Additionally, a similar program can be explored with the CTA to further take advantage of the Purple Line, reduce demand for parking, and limit traffic volumes in the area. The University can work closely with the CTA and Metra to design modified schedules, as appropriate for event days.

Police Traffic Control

Similar to football games at Ryan Field, Northwestern University would continue to engage with Evanston Police to actively manage transportation at key intersections and along streets in the vicinity of Ryan Field. Today, police control and manage intersections in the area generally bounded by Green Bay Road on the west, Ridge Road on the east, Isabella Street on the north, and Lincoln Street on the south. This coverage area is generally expected to be consistent with what would be appropriate for concert events.

Rideshare Designated Staging Area

In general, rideshare tends to be more popular at concert events than at football games with a slightly higher use after the event than when arriving to the event. To orient passenger routes and manage traffic circulation and staging for waiting rideshare vehicles, an off-site rideshare staging area should be established. Additionally, Northwestern University can coordinate with Uber and Lyft to define the boundaries of a geofence that, through each platform's mobile app, restricts a geographic area in which passengers can be picked up.

Conclusion and Recommendations

As part of the proposed Ryan Field redevelopment, Northwestern University proposes to host concert events, primarily on weekend evenings. Based on the reduced event capacity relative to football games, transportation characteristics associated with concert events, a range of available on-site and off-site parking options to distribute traffic, and the stadium's unique position in the market to leverage two rail transit lines, the existing multimodal transportation infrastructure combined with event transportation management strategies can accommodate concert events at the proposed Ryan Field redevelopment.

- Concert event capacity is proposed to be 20 percent less than the proposed seating capacity for football games and 40 percent less than Ryan Field's current capacity.
- Parking for concert events is proposed via a mix of on-site and off-site locations that distribute traffic-related levels of impact across a broad street network.
- Ryan Field is uniquely positioned among Chicago-area concert venues to take advantage of two separate train options. Other popular venues have one or no convenient rail options. For example, Wrigley Field is served by the CTA's Red Line, but not Metra and Ravinia is served by Metra, but not the CTA. Soldier Field and Huntington Bank Pavilion at Northerly Island are $\frac{3}{4}$ to over a mile walk to the CTA's Red Line.
- Concerts would typically occur during weekend evenings when background traffic volumes are lower, and when streets have greater available capacity, compared to daytime hours.
- Several transportation management strategies are planned to build off existing measures in place for football games and further increase transit use, limit neighborhood traffic and parking impacts, manage rideshare options, and monitor/update the plan in coordination with the community as conditions evolve over time.