



MISM6210

Business Proposal

TASTE OF VICTORY:
A VISUAL EXPLORATION OF HORSE
RACING'S CULINARY LANDSCAPE

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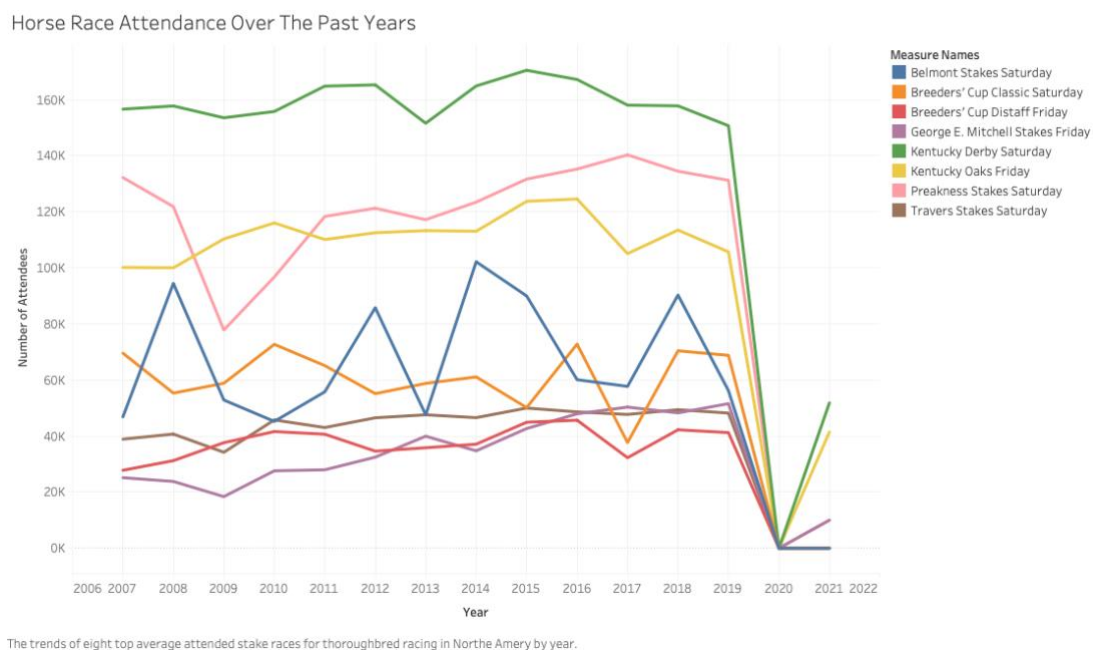
Phase 1

Problem Statement:

The declining popularity of horse race attendance in recent years due to increased competition from other forms of entertainment is threatening the industry's financial sustainability.

The Impact

This project aims to address the challenge of declining horse racing attendance, which has been a significant issue for the industry in recent years. Just in 2020, the industry lost over \$5 Billion compared to prior years¹ due to distinct factors including but not limited to COVID-19 and increased competition in the entertainment and sports industry combined with changing demographics. Horse racing events are designed to draw large crowds of spectators, who will not only spend money betting on the races but who will also pay for a variety of other products and services offered such as food, drinks, merchandise, etc., which makes horse racing a significant source of revenue. Furthermore, the horse racing industry in the United States is a major contributor to the country's economy. Not only does it generate approximately \$50 billion (about \$150 per person in the US (United States)), it also provides employment to almost one million people, and contributes \$38 million in direct compensation including salaries, wages and benefits (American Horse Council, n.d).² Thus, it is evident that the diminishing appeal of horse racing is a significant problem that could result in severe consequences for the industry and economy. Consequently, it is imperative for the industry to address this issue.



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¹ Mills, K. (2020, September 18). Is Sport Horse Racing Dying Industry? Horse Racing Sense. <https://horseracingsense.com/is-sport-horse-racing-dying-industry/>

² American Horse Council. (2021). Economic Impact of the Horse Industry. Retrieved from <https://horsecouncil.org/resources/economics/>

³ (2021, September 23). American Thoroughbred Racing Top Attended Events. In Wikipedia. Retrieved: February 10, 2023, from https://en.wikipedia.org/wiki/American_thoroughbred_racing_top_attended_events

A Visual Exploration of Culinary Innovation in Horse Racing

The relationship between horse racing and the culinary arts plays a key role in enhancing the overall experience for attendees during the event. The selection of food and drink offerings, seating arrangements, and pricing are all factors that can influence the attendee experience. While the excitement of the races may sometimes detract from the focus on culinary offerings, a well-crafted food and drink program can add value to the racing experience, creating a unique and memorable event that appeals to a wide range of attendees. Including local cuisine, wine and spirits are some of the factors that can significantly impact attendee satisfaction. The goal of this project is to create a visual tool that enhances the horse racing experience for attendees by providing valuable insights and information on the races including past performance data and incentivizing them to engage in the event through discounted food offerings. By creating this innovative tool, we aim to attract a broader and more diverse audience while still retaining the loyalty of longstanding fans of the sport.

Sport Selection

This study will focus on **horse racing** as the specific sport chosen for the project for two vital reasons: its international prestige and global participation, and its strong connection to culinary arts. Horse racing is an extremely popular sport worldwide with a diverse fanbase that includes individuals from a wide range of socioeconomic backgrounds. Traditionally, the sport has been associated with the wealthy and elite because of the excessive cost of horse ownership and training, among other expenses. Nonetheless, this “elite” sport also attracts enthusiasts from diverse backgrounds including working-class individuals, retirees, and people from rural communities. Besides the historical and cultural significance, legal betting contributes to the sport's popularity. In fact, the legality of betting on horse racing has a long and established history tracing back to 19th century when the sport became prevalent in the U.S.⁴

For many attendees, the culinary experience is a crucial aspect of the horse racing event, as the food serves as a connector that enhances the socializing and atmosphere while creating a unique and memorable experience that is rare to find in other sports. Culinary arts and fan engagement are closely tied to horse racing, a sport with a rich culinary history that can be explored using data visualization and interactive dashboards.

Kentucky Derby

The Kentucky Derby is a specific horse racing event held annually on the first Saturday in May at Churchill Downs in Louisville, Kentucky. It is a major cultural event, the longest continually-held annual sporting event in the United States⁵ and is often called "the most exciting two minutes in sports." The Kentucky Derby is the first leg of the Triple Crown of Thoroughbred Racing, which also includes the Preakness Stakes and the Belmont Stakes. A Kentucky Derby party, on the other hand, is a social gathering that is typically held to watch the race and celebrate the event.

There are other countries that celebrate horse racing like is done in the United States. These countries include England, Australia, Ireland, Japan, and China, to name a few. There are numerous races that hold similar cultural significance to the Kentucky Derby in other countries, including The Epsom Derby, The Melbourne Cup, The Prix de l'Arc de Triomphe and the Dubai World Cup.

Noteworthy, not all horse racing events are as significant as those listed above. Like any other sport, there are many less popular events taking place around the world. While these smaller races may not have the same

⁴ Horseracing.net." (n.d.). Why horse racing is legal in the USA. Retrieved February 21, 2023, from <https://www.horseracing.net/us/why-horse-racing-is-legal-in-the-usa>

⁵ Churchill Downs Incorporated. (n.d.). Home. Retrieved from <https://www.churchilldownsincorporated.com/>

prestige or cultural significance as major events like the Kentucky Derby, they are still an important part of the horse racing industry, share similarities, and provide opportunities for both horses and jockeys to compete and for fans to enjoy the sport.

As already established, food and horse racing share a powerful connection and one way that food and drinks are linked to horse racing is through the creation of signature dishes and cocktails. For example, the Kentucky Derby is famous for its mint juleps⁶, and many racetracks have their own unique food offerings that are strongly associated with their events. In this study, the focus will be on **the general admission attendees** which is an important yet often ignored segment with the potential to enhance the overall event experience. While VIP attendees often receive special treatment and amenities, general admission attendees typically have a less glamorous experience (many of whom are attending the event and perceive it as a 'once-in-a-lifetime-experience'). Additionally, general admission attendees offer more flexibility in terms of testing, more willing to provide feedback/ participate in surveys, better in terms of scalability and practicality, and by gathering accurate data and insights into their preferences and needs, strategies can be generated for improving the food and beverage experience at events.

Data Gathering and Analysis Plan

The creation of this insightful dashboard will rely on the collection and creation of relevant data. This data will help gather vital information regarding horse race, finalist horses, finalist jockeys, current ranking, and current odds. By gathering this information, attendees will be able to decide which horse to vote for and potentially win food incentives. The following section shares an outline of some of the data sets that will be used for this project.

Dataset 1: Jockey Performance

Jockey Performance: Experience		
Jockey Name	Years as a jockey	Home Country

Dataset 2: Horse Performance

Horse Performance: Historic Wins	
Horse Name	Number of 1 st Place wins

Dataset 3: Horse Popularity

Horse Popularity: Real-Time Votes	
Horse Name	Number of votes (count of votes per horse)

Dataset 4: Horse Points

Road to the Kentucky: Horse Points	
Horse Name	Horse Points

(source: <https://www.kentuckyderby.com/horses>)

⁶ ABC News. (2019, May 4). Mint julep, the iconic Kentucky Derby cocktail, has official recipe. Good Morning America. Retrieved from <https://www.goodmorningamerica.com/food/story/mint-julep-iconic-kentucky-derby-cocktail-official-recipe-62700367>

Dataset 5: Attendance Tracker

Real-time Attendance Tracker	
Time (every 30 minutes)	Number of attendees

Project Scope and limitations

Project Scope:

- Develop an interactive and user-friendly dashboard that assists general admission attendees in selecting a winning horse to do a symbolic bet on (vote) in the final derby.
- The dashboard will provide attendees with valuable information on the 20 horses and jockeys in the race, including past performance records, odds, and jockey rankings.
- Attendees who use the dashboard to bet on a winning horse will receive a discount on food and beverage offerings that correspond to the nationality of the winning horse if they bet correctly.
- While the race itself is short, it is also perceived as a day-long event and an opportunity for people to engage with the race and socialize. The project will focus on the General Admission attendees for the Kentucky Derby and the day-long event rather than the final race alone.
- While our project will primarily use the Kentucky Derby as an example of the broader horse racing industry, we will also draw on additional data sources and case studies as needed to provide a comprehensive analysis of the industry's current state and prospects.

Project Limitations:

- The existence of other factors that impact attendance at the Kentucky Derby. The project is focused solely on the potential of using food to increase attendance for General Admission participants at the Kentucky Derby and does not consider other factors that may impact attendance, such as ticket prices, competition from other events, limited availability of accommodations or changes in consumer behavior.
- Project's data will be limited to publicly available information of Kentucky Derby attendees and/or generated through chat ChatGPT, not primary research through surveys or focus groups.
- Due to differences in event size, all potential variations in spectator behavior and spending patterns across different events may not be accounted for. Instead, the project will focus on analyzing data and patterns across Kentucky Derby to draw meaningful insights and recommendations.
- The team will not be responsible for implementing any changes to the food and beverage offerings at the Kentucky Derby arena and will be limited to only providing recommendations based on their data analysis and dashboard design.

Units of Analysis and Metrics

Various aspects of the event that would be of interest to the general admission attendees were considered to identify the key metrics for the Kentucky Derby dashboard. The units of analysis were first identified within each unit of analysis, then specific metrics that are important to track were selected.

The key units of analysis in the dashboard include horses and jockeys as attendees will be interested in learning more about the jockeys riding each horse and the horse itself. As well, the general admission attendees are also a unit of analysis. Metrics included are:

- Number of attendees in the arena (general admission)
- Number of historical wins for each horse
- Years of experience for each jockey

- Number of horse points gathered from the "Road to Kentucky Derby,"
- Number of votes for each horse (updated in real-time)
- Foot traffic in celebration tents (number of people who visit the celebration tents over a given period of time)
- Wait times (measures the amount of time attendees have to wait in line to get their free snack or purchase additional food)

Phase 2

Data Gathering and Wrangling for Visual Artifact Design

Jockey Performance: Experience

Jockey Performance: Experience		
Jockey Name	Years as a jockey	Home Country
Robby Albarado	26	United States
Shawn Bridgmohan	20	Jamaica
Declan Cannon	8	Ireland
Jesus Castanon	30	Mexico
Florent Geroux	16	France
Jack Gilligan	7	England
Leandro Goncalves	20	Brazil
James Graham	22	Ireland
Brian Hernandez	13	United States
Carlos Hernandez	2	Puerto Rico
Channing Hill	12	United States
Joseph Johnson	27	United States
Chris Landeros	10	United States
Corey Lanerie	25	United States
Julien Leparoux	11	France
Miquel Mena	13	Peru
Disiel Osorio	6	Panama
Esequel Rivera	1	Panama
Joe Rocco Jr	17	United States
Ricardo Santana	5	Panama

Horse Performance: Historic Wins

Horse Performance: Historic Wins	
Horse Name	Number of 1 st Place wins
Two Phil's	2
Derma Sotogake	2
KingsBarns	2
Forte	3
Practical Move	2

Confidence Game	3
Angel Of Empire	1
Raise Chain	1
Tapit Trice	1
Jace's Road	1
Dura Erede	0
Major Dude	1
Rocket Can	2
Disarm	0
Sun Thunder	0
Red Rote One	0
Instant Coffee	2
Funtastic Again	0
Classic Car Wash	0
Continuar	1

Horse Popularity: Real-Time Votes

Horse Popularity: Real-Time Votes	
Horse Name	Number of votes (count of votes per horse)
Two Phil's	7872
Derma Sotogake	11925
KingsBarns	9683
Forte	10564
Practical Move	8715
Confidence Game	1237
Angel Of Empire	7674
Raise Chain	8720
Tapit Trice	1454
Jace's Road	6286
Dura Erede	9356
Major Dude	10897
Rocket Can	6423
Disarm	5573
Sun Thunder	1623
Red Rote One	12035
Instant Coffee	10811
Funtastic Again	6271
Classic Car Wash	9494
Continuar	2003

Road to the Kentucky Derby: Horse Points

Road to the Kentucky Derby: Horse Points	
Horse Name	Horse Points
Two Phil's	123
Derma Sotogake (JPN)	100
KingsBarns	100
Forte	90
Practical Move	60
Confidence Game	57
Angel Of Empire	54
Raise Chain	54
Tapit Trice	50
Jace's Road	45
Dura Erede(JPN)	40
Major Dude	40
Rocket Can	40
Disarn	40
Sun Thunder	34
Red Rote One	33
Instant Coffee	32
Funtastic Again	30
Classic Car Wash	26
Continuar(JPN)	25

(source: <https://www.kentuckyderby.com/horses>)

Real-time Attendance Tracker

Real-time Attendance Tracker	
Time (every 30 minutes)	Number of attendees
10am	15,000
10:30am	30,000
11:00am	36,000
11:30am	45,000
12:00pm	68,000
12:30pm	100,000
1:00pm	120,000
1:30pm	125,000
2:00pm	140,000
2:30pm	145,000
3:00pm	147,000
3:30pm	150,000

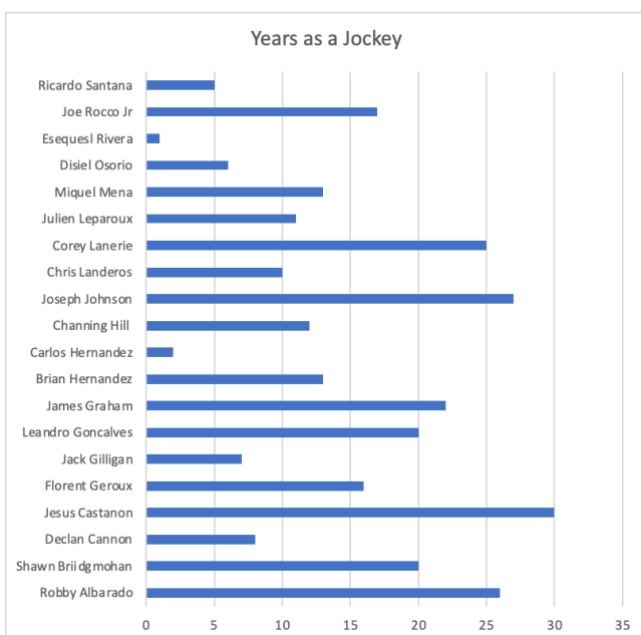
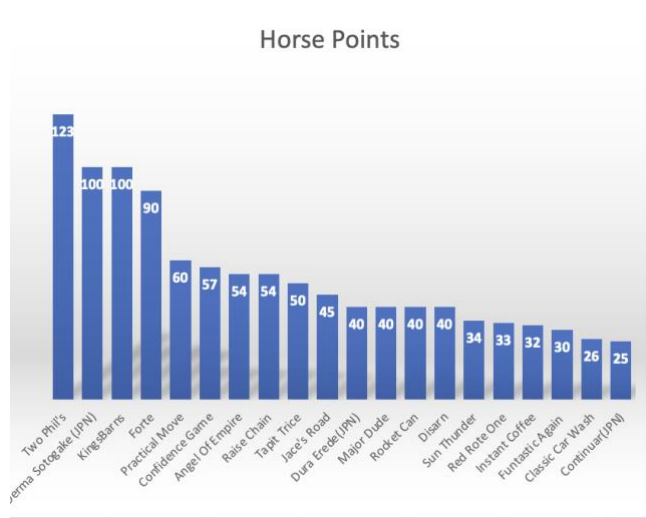
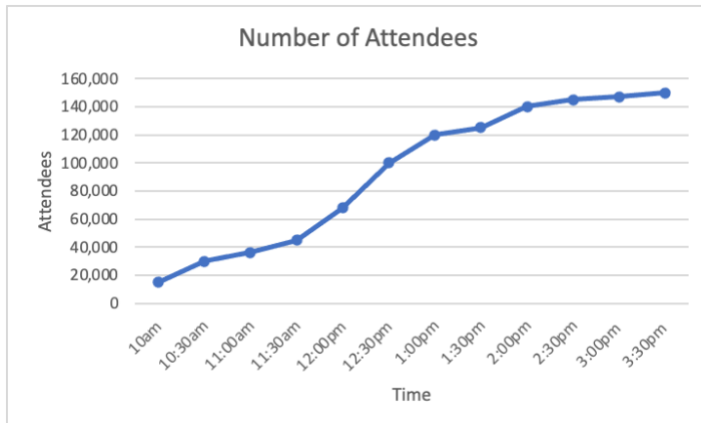
Wait times Tracker

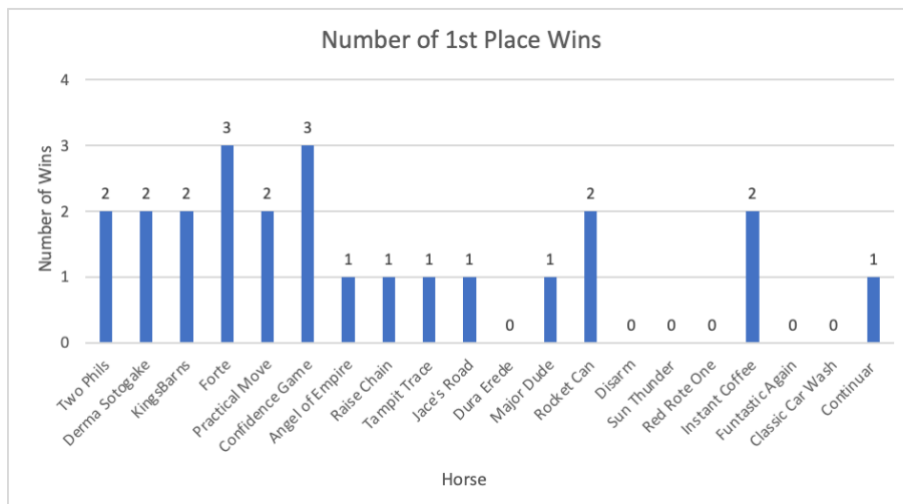
Wait times Tracker	
food vending court	Estimate waiting time(mins)
Derby Diner	45
Paddock Pantry	20
Winner's Circle Cafe	15
Jockey's Joint	60
Furlong Food	25
Triple Crown Grill	5
Turfside Tavern	5
Starting Gate Bisto	40
Saddle Club Snacks	35
Railside Refreshments	15
Diamond Dogs	10

Planning Visual Artifacts and Metrics Mapping

1. Line graph: **Number of attendees in the stadium over time.** This metric can update every 30 minutes, providing a real-time representation of how many people are currently enjoying the event. Seeing the number of attendees on a line graph can create a sense of excitement and community among viewers and attendees alike, adding to the overall experience of the event.
2. Bar chart: **Historical wins for each horse.** This metric provides attendees with information on each horse's past performance, which can be a useful factor in predicting future success. By presenting the number of historical wins in a clear, visual format, attendees can quickly compare each horse's track record and make informed decisions when placing votes on their favorite horse.
3. Bar chart: **Years of experience for each jockey.** This metric provides attendees with information on the experience level of each jockey, which can be an important factor in predicting their performance. Attendees can quickly compare each jockey's background and make informed decisions when placing votes on their favorite horse-and-jockey combination.
4. Bar chart: **Horses' points earned from the "Road to the Kentucky Derby" series of races.** This metric provides attendees with information on each horse's performance leading up to the Kentucky Derby, which can be a useful factor in predicting their success in the final event. Attendees will compare each horse's standing and see which ones have qualified for the final event with the most points.
5. Bar chart: **Number of bets placed on each horse.** This metric provides attendees with information on the popularity of each horse among voters, which can be a useful factor in predicting the odds for each horse to win. Attendees can compare each horse's level of support and see which ones are the most popular picks. This chart can be updated in real-time as new votes are placed, allowing attendees to track the popularity of each horse leading up to the race.
6. Heat map: **Wait times at celebration tents.** This metric provides attendees with information on the busiest celebration tents and longest wait times for food and drinks, which can be a useful factor in planning their food purchases and minimizing wait times. Attendees will identify the areas with the shortest and longest lines and make informed decisions on where to go to get their food. The heat map can be updated in real-time as wait times change, allowing attendees to make informed decisions throughout the event.

Visual Artifacts





General Admission Attendee Journey

1. Attendees arrive at the horse racing event and are given information about the voting system.
2. They access the online voting system and select the horse they think will win for each of the 13 races leading up to the Big Race.
3. If they bet for the right horse in the first 13 races, they receive a free snack food. They may also choose to purchase additional food while picking up their free snacks.
4. As the event builds up to the Big Race, attendees feel more excited and invested in the outcome.
5. All 20 horses for the Big Race are predetermined. Voting starts one hour before the race and attendees have up to 1 minute before the race starts to bet on which horse they think will win.
6. If they bet correctly on the winning horse, they receive a discount on food or drink items inspired by the top 10 seeded horses in the race.
 - a. Winning betters receive a coupon (25% discount up to \$20 per attendee) that can be applied to one of the featured cocktails or foods, and they can choose which one they want to enjoy.
7. The featured food and drinks are served in a **celebration tents** (managed by the hosts of the race), where attendees can enjoy the atmosphere and socialize with other racegoers.
8. Before heading to the **celebration tents**, attendees will use the app to check the heat map, which displays the busiest areas and wait times at the celebration tents. This will allow them to choose less trafficked areas and nationality-specific tents with different offers.
9. Attendees who didn't win the bet can still enjoy the special featured foods and drinks, but they have to pay full price.

Exhibits

Exhibit 1: Brainstorming

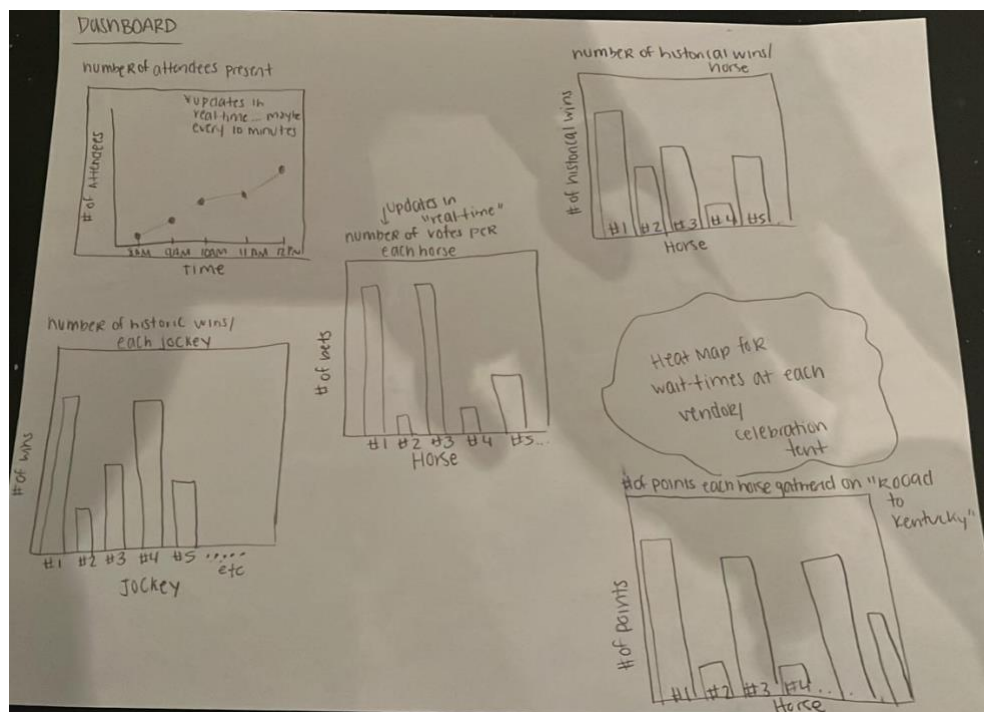


Exhibit 2: General Admission POV⁷



Figure 1: General Admission Picnic Blanket

⁷ No Home Just Roam. (2019, May 5). Talk Derby to Me: Our Day at the 2019 Kentucky Derby. Retrieved from <https://nohomejustroam.com/talk-derby-to-me-our-day-at-the-2019-kentucky-derby/>

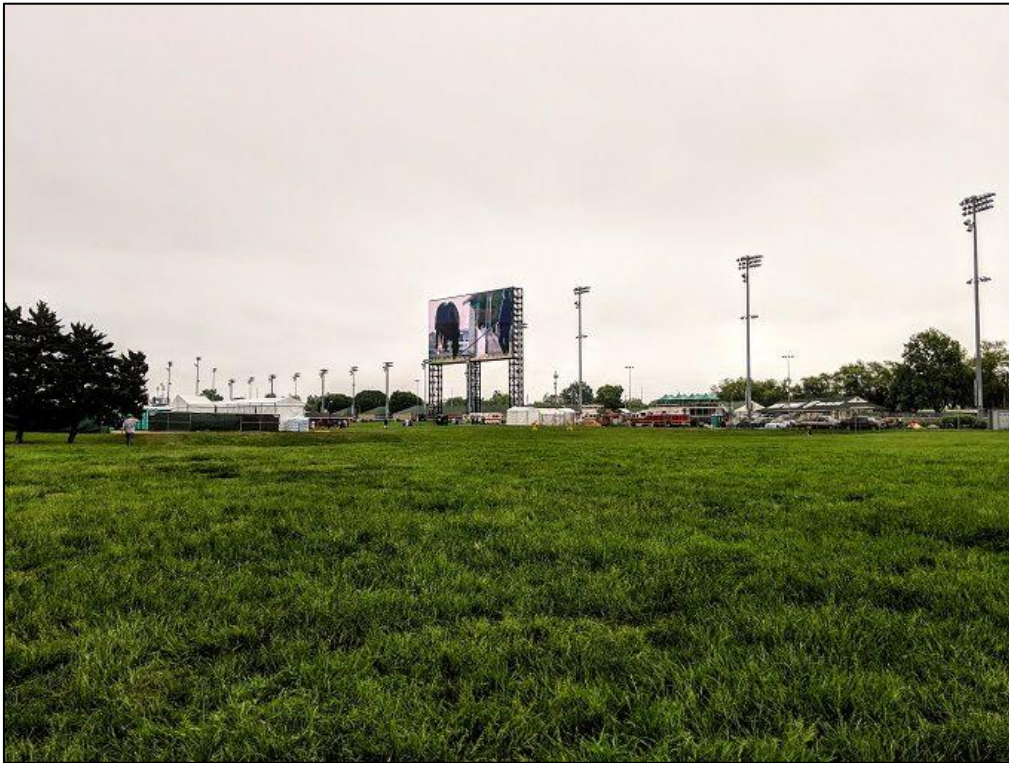


Figure 2: Infield at Churchill Downs

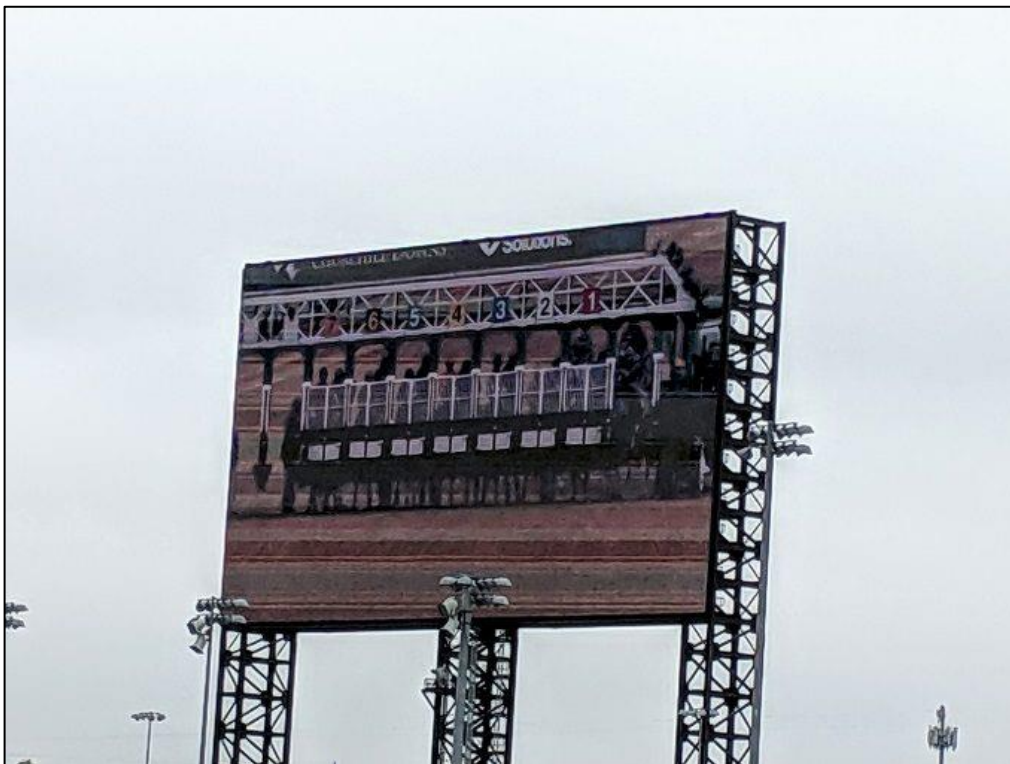


Figure 3: World's Largest 4K Video Screen for GA

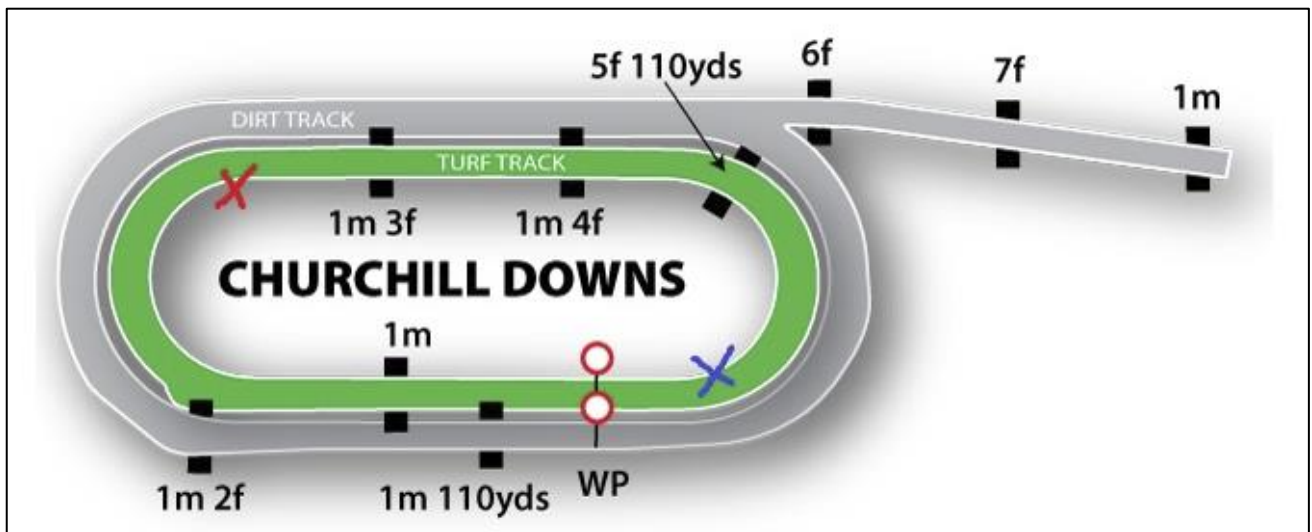


Figure 4: Churchill Downs Racetrack Layout



Figure 5: Kentucky Derby Infield View