PLAYING FOR KEEPS:

Examining Stadiums For a Healthy Future

There is a Life Cycle to Stadiums, just as all things, but these facilities have larger effects than we may realize. Stadiums have the ability to bring life into areas but can also kill these places, if not created to have long-term success. The Olympic Swimming Venue in Rio, Brazil was totally abandoned only six months after the completion of the 2016 Summer Olympics. These facilities have great hype and the expectation of bringing great revenue to areas, but too many times, we see these facilities begin to rot and make us question if they were really worth it.

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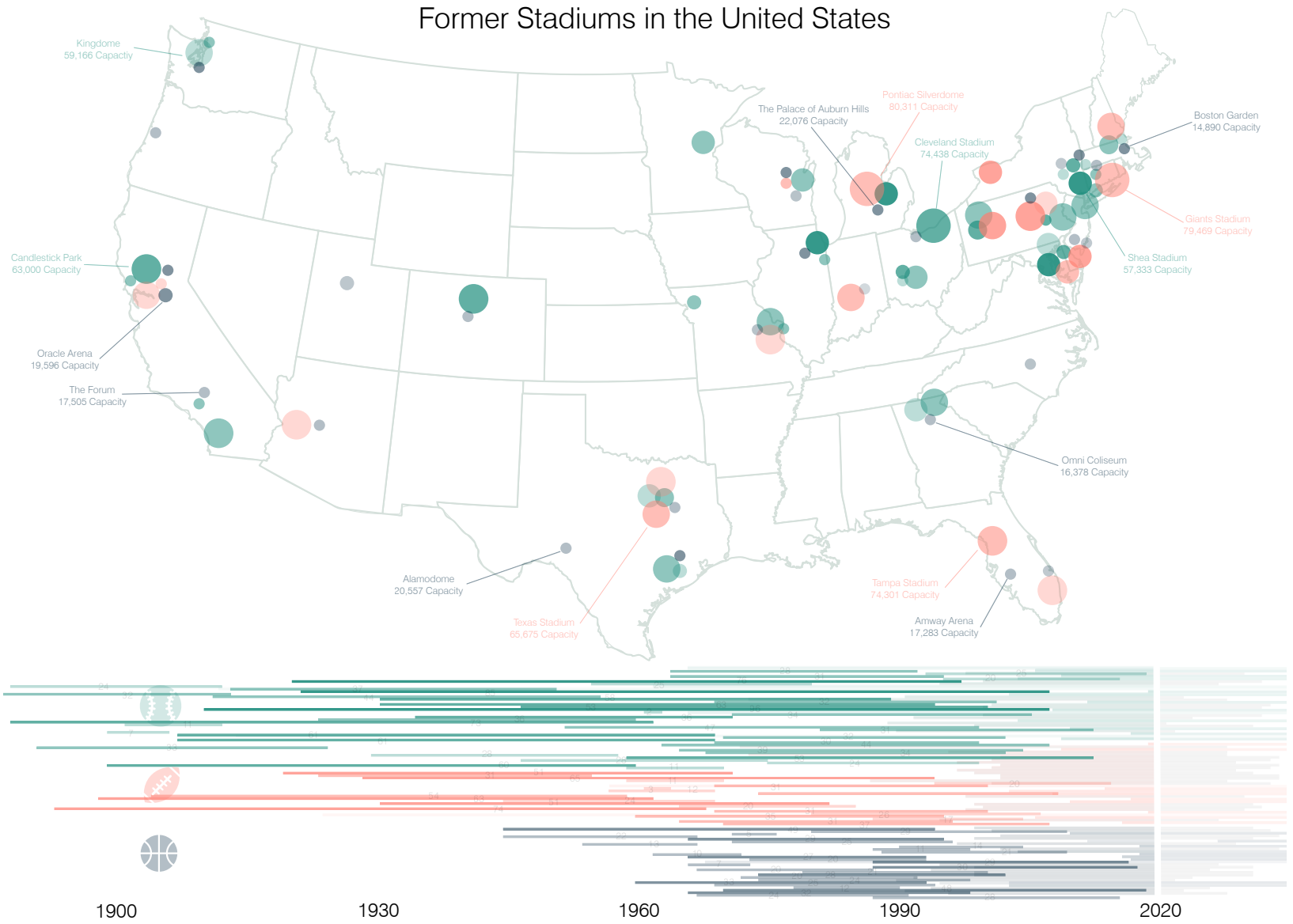
A100

“Stadiums Have Lifespans of 32 Years”

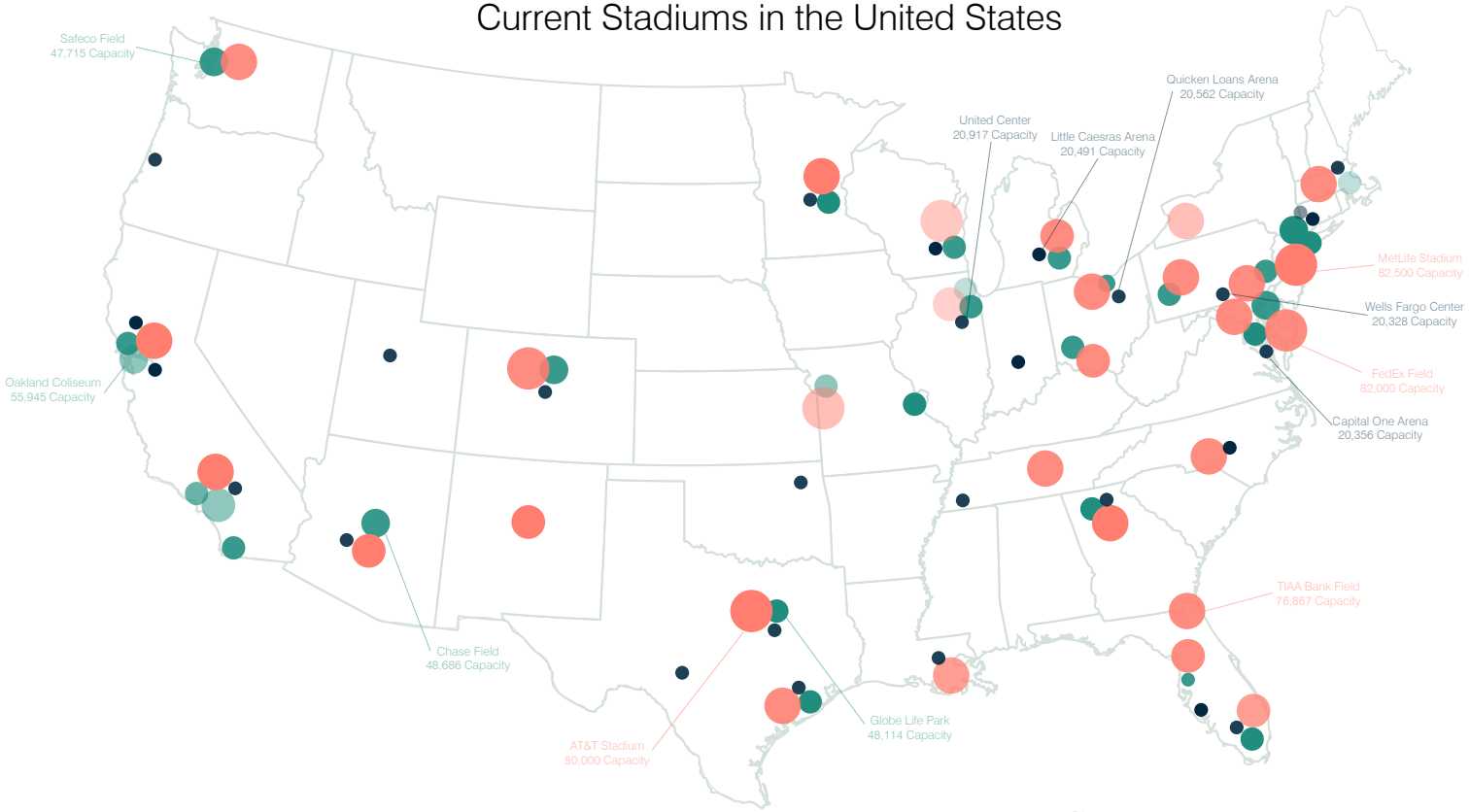


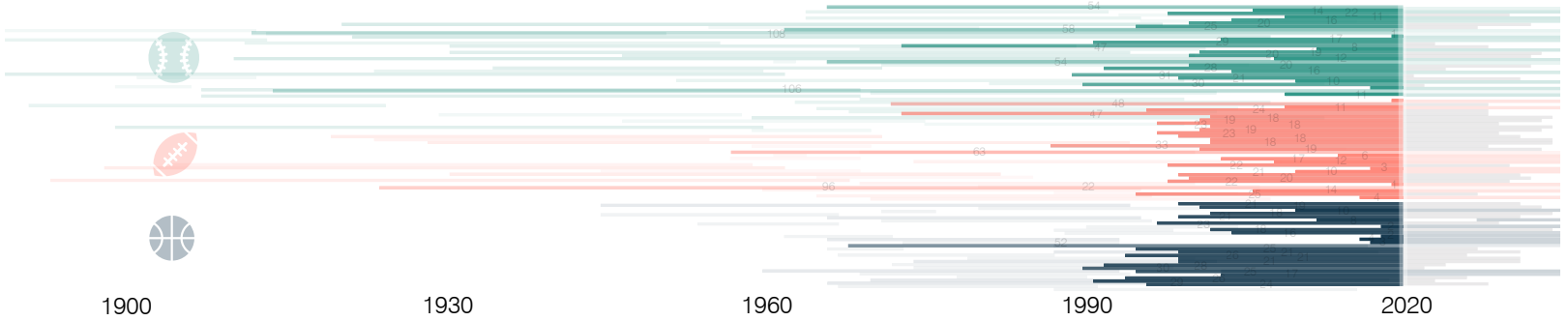
Data from Former Stadium Lifespans show that the average stadium lifespan in 32 years. A large amount of stadium history comes from the Northeast Region of the United States due to the growth of America westward. Even in areas where professional sports have been played for over a century, there has been a need for new construction and development.

A101

“Stadiums Are Staying On the Same Trend”

Current Stadiums in the United States

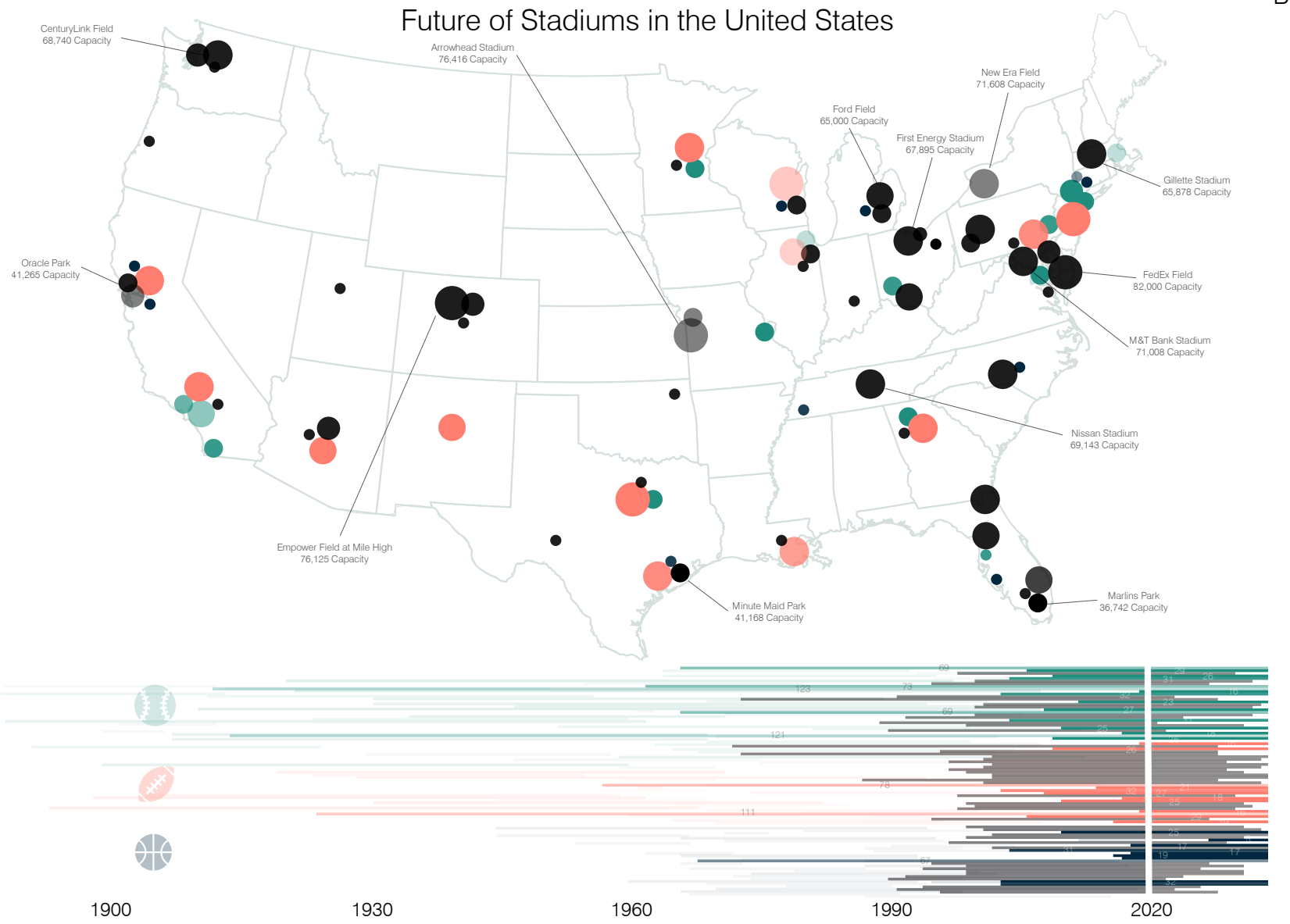




Most professional stadiums, used today, have been built during or after 1990. This reinforces the data from previous stadiums that these structures are not being used more than 35 years. With the continued advancements in society, the question lingers just how long before we are having to replace all stadiums.

A102

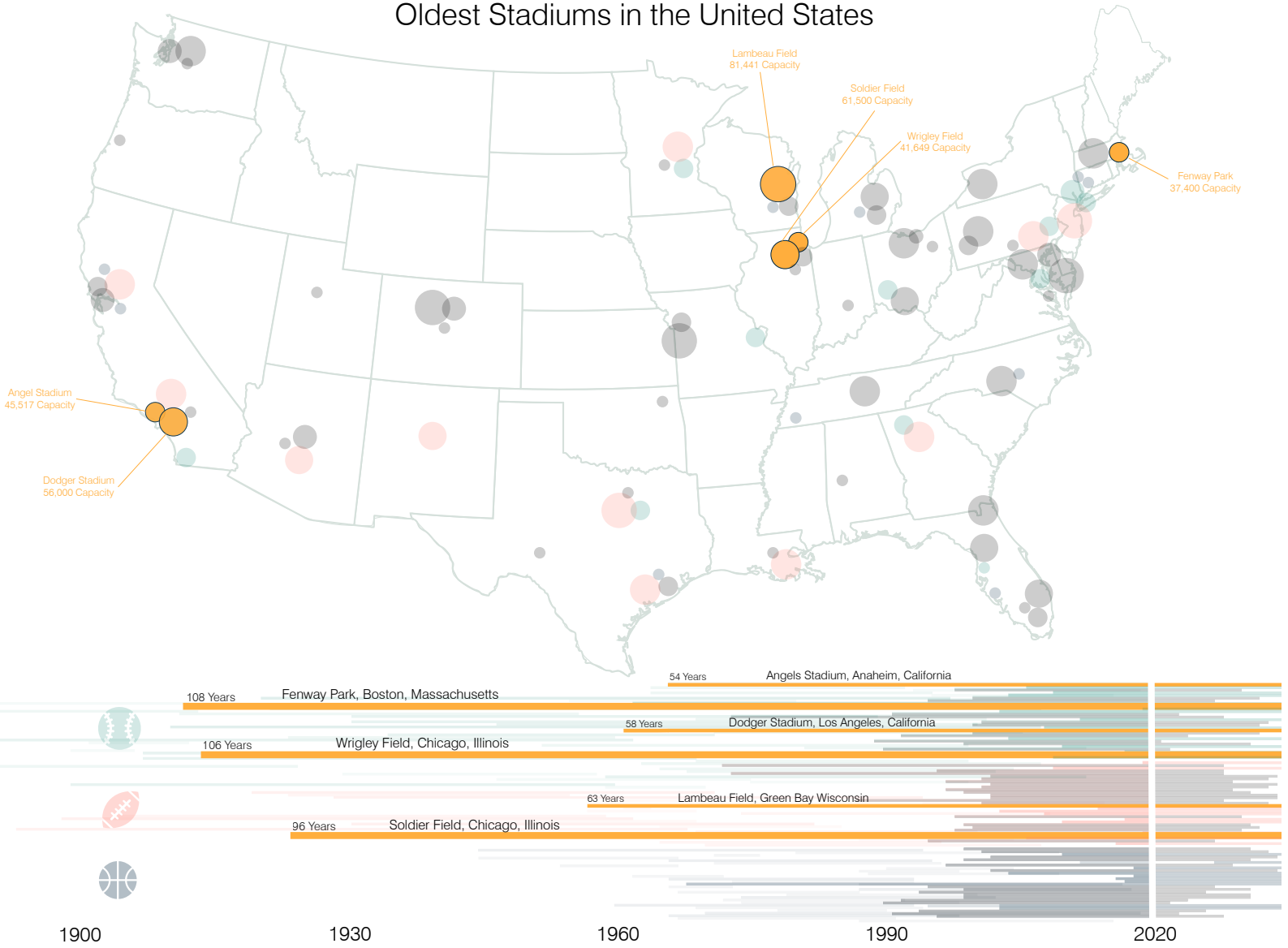
"Many Stadiums Won't Be Around For Long"



Using the average lifespan of 32 years, the trend would predict that by 2035, over half of the stadiums, used today, will no longer be open. There will be no long-term benefit for more than 40 pieces of architecture built across the United States. There are economic and social issues with wasting the resources, time, and effort put into creating these "palaces of sport" for only 32 years of use.

A103

“What Makes These Stadiums So Sustainable?”



Even with so many facilities not lasting 35 years, there is a select few stadiums that have been able to last over double the typical lifespan of a stadium. These three active stadiums have all been used for almost a century, each. With two of these facilities being within the city of Chicago, there obviously is a question as to why there is an ability for stadiums to last within that area. Even with these facilities being in the minority, as far as age is concerned, these facilities have been able to survive and thrive into the 21st Century.

B100

"A Long & Useful
Life Is Being Rooted
In the City"

In Chicago, Wrigley Field has been a core piece for the locals since 1914. This Stadium has been in use for over a Hundred years and is one of the most iconic sports venues in the United States. The key to all the success is the ability for the stadium to have grown with the city. The city infrastructure and Neighborhoods are working in harmony with the stadium to create a strong and inviting atmosphere for spectators. You cannot talk about the city of Chicago without the idea of the "Friendly Confines" at Wrigley Field coming into your head.

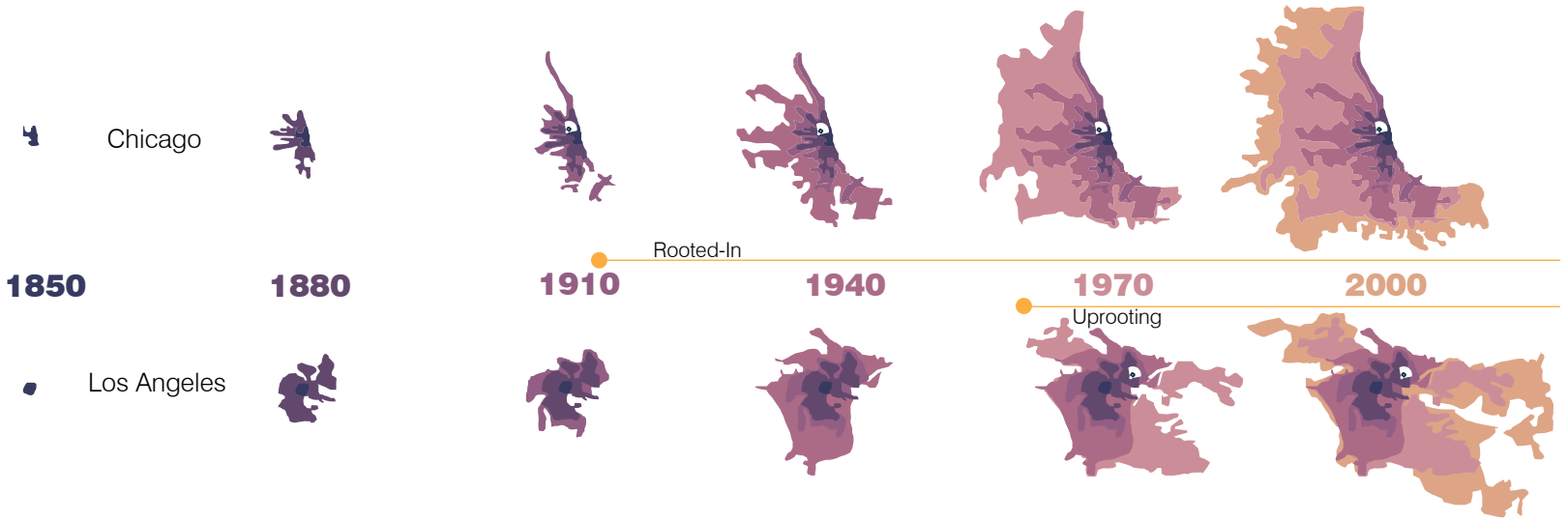
B101

“Stadiums That Intrude On Cities Are Uprooting Cultures”

Within Chavez Ravine, there was a large community of Hispanic people that had grown on and developed the land. This area was home to culture, but their home was stripped away from them. The Brooklyn Dodgers took advantage of moving out west during the expansion of the United States. The team bought Chavez Ravine and forcibly removed the natives from their homes. These people were promised new, better housing to be built, but this promise was never fulfilled by the local government. Dodger Stadium would become an iconic venue for many, but to the Hispanic culture of Los Angeles, it was a burden and reminder of the pain their families had been through. This injustice led to conflict and the breaking between a stadium and its local community.

B110

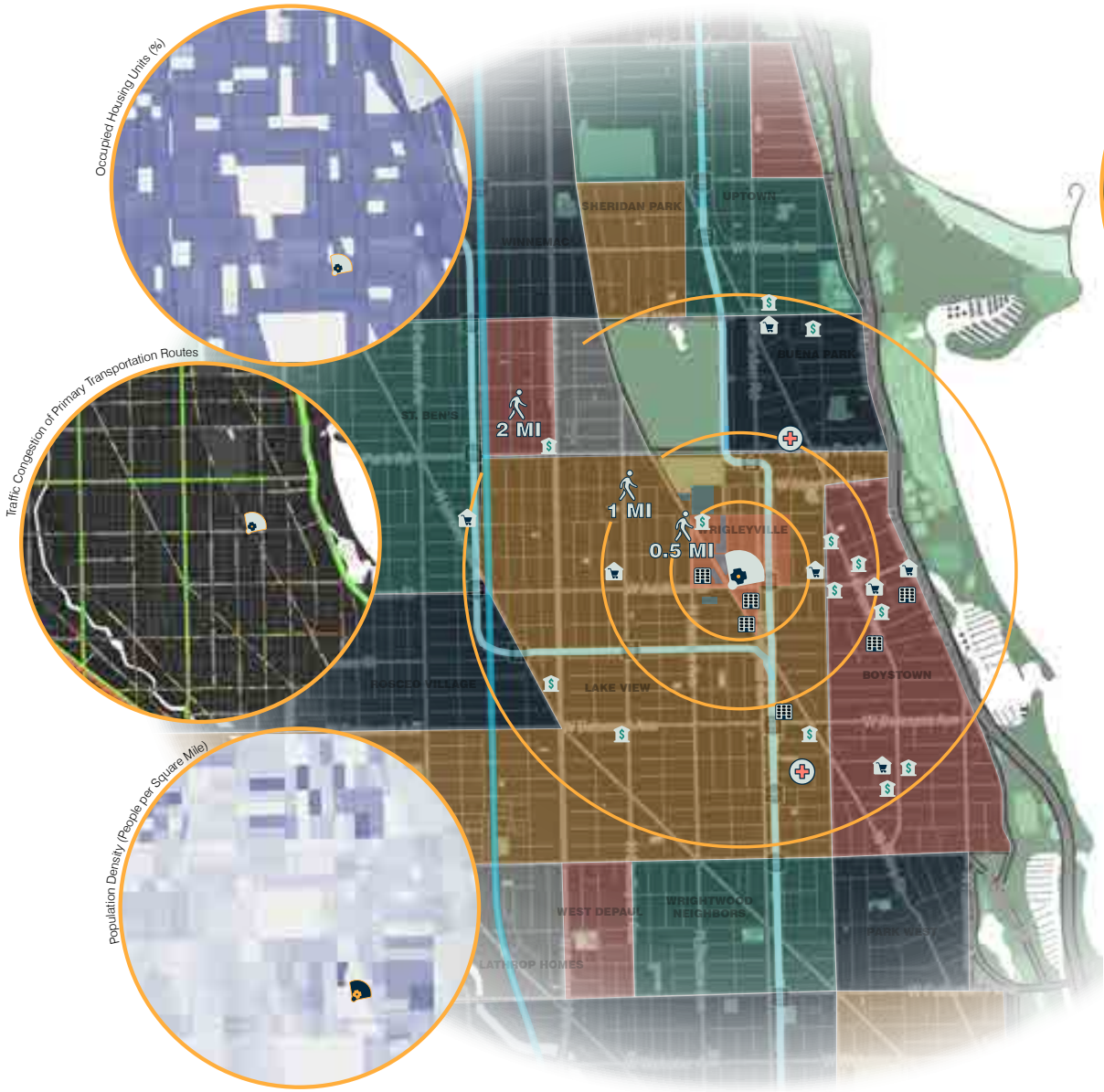
"The Difference in Chicago & Los Angeles "



Chicago and Lost Angeles have gone through major growth since 1850. In correlation to their stadiums, Wrigley Field has been around since the early 1910s and has been able to grow and adapt with the city. Meanwhile, Dodger Stadium was planted in a location of Los Angeles that had already been inhabited for over 60 years. Some stadiums have been apart of the growth of the city while others lack the connection. Wrigley Field has been able to last so long because it has achieved what no modern stadium can, which is to be rooted into the core of a mega city.

B120

“Chicago Is Built Around Wrigley Field”



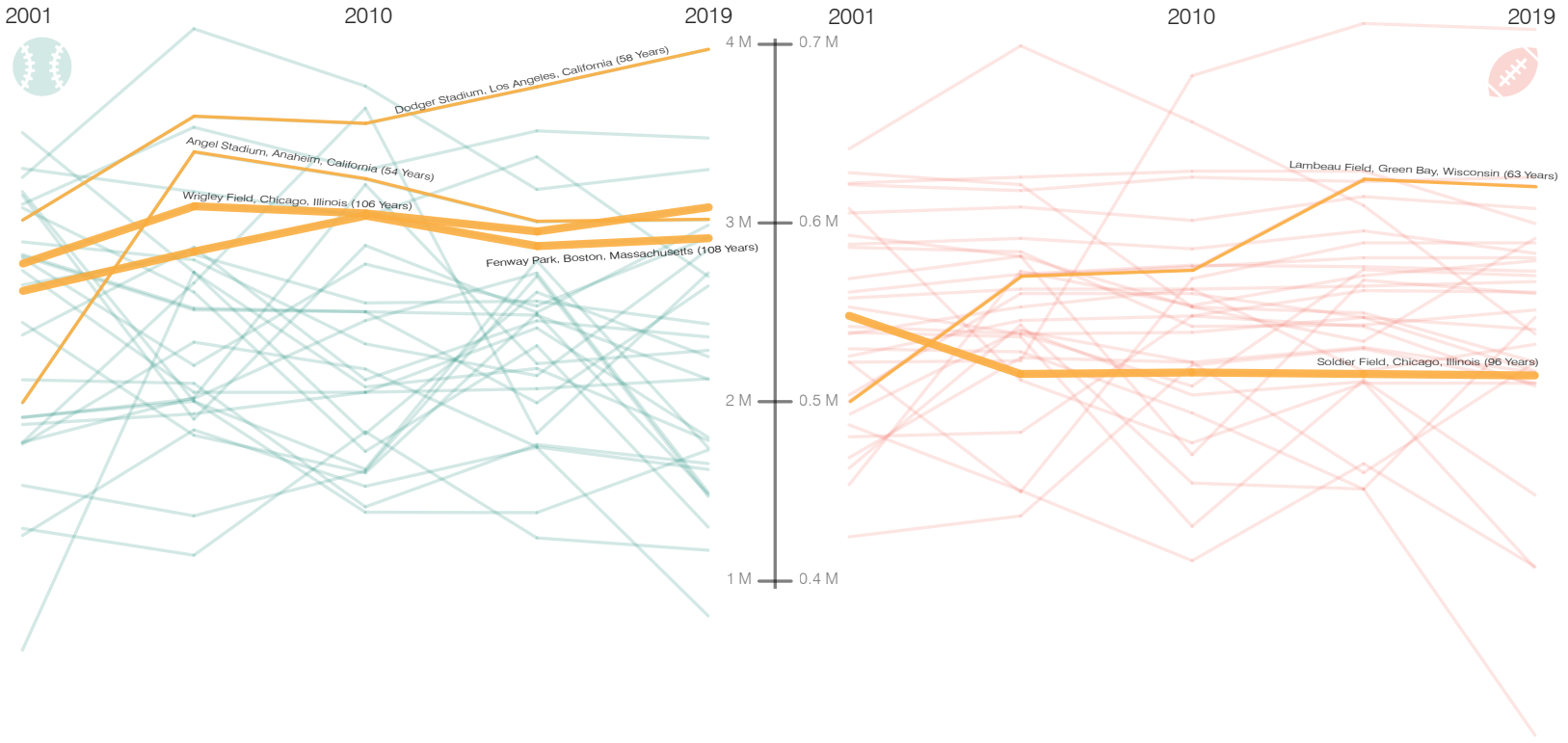
Wrigley Field, Chicago, Illinois

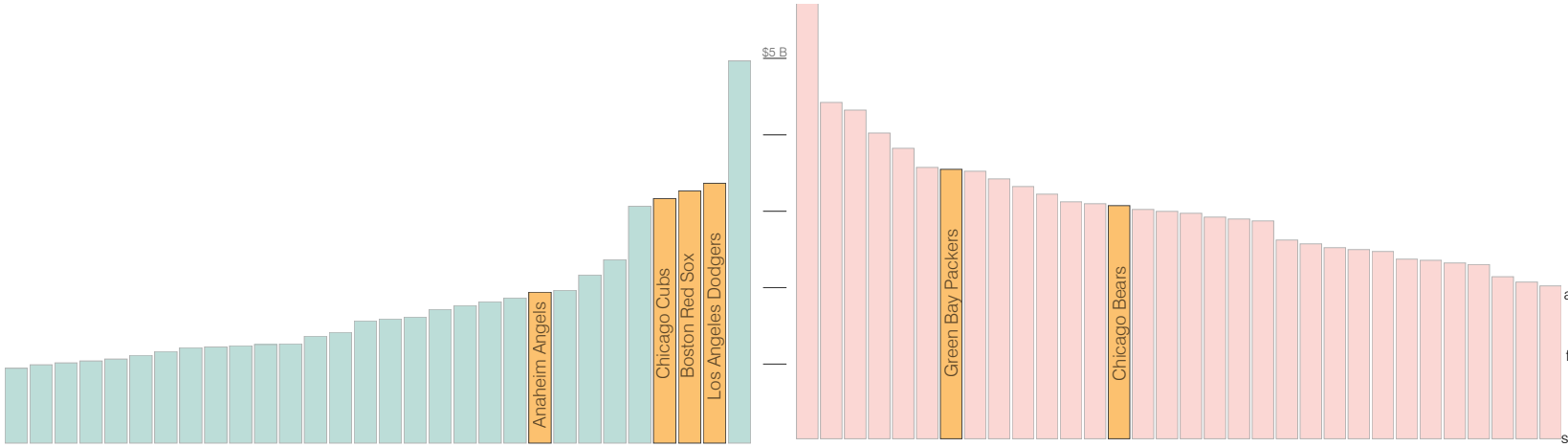
Wrigley Field has been so influential to Chicago that the neighborhood encompassing the field has been named Wrigleyville. Wrigley Field has established strong connections with the public Transportations used in the city. This allows for more people to not need to drive to a game, but simply take a rail or bus to arrive. Local bars and restaurants surround the stadium, giving more Entertainment and financial opportunities to the city. Necessities such as housing, food,safety, and entertainment have all a place within the 2 mile radius of the ballpark. Wrigley Field is not necessarily just a venue to watch a baseball game, but it is a place to spend your time with family and friends, in a variety of ways.

C100

“Age Doesn’t Matter To Stadium Value”

Yearly Attendance in 21st Century





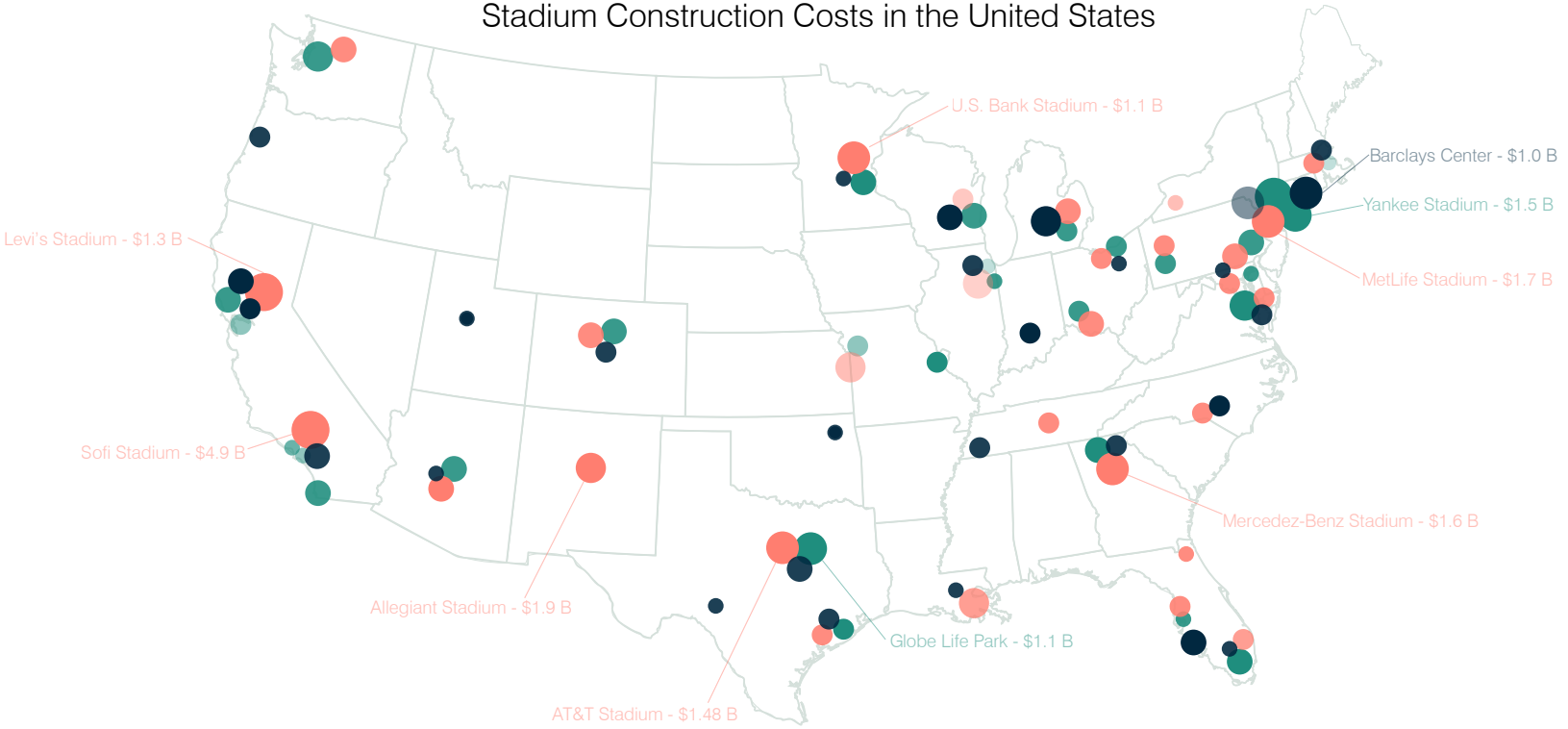
Franchise Monetary Value

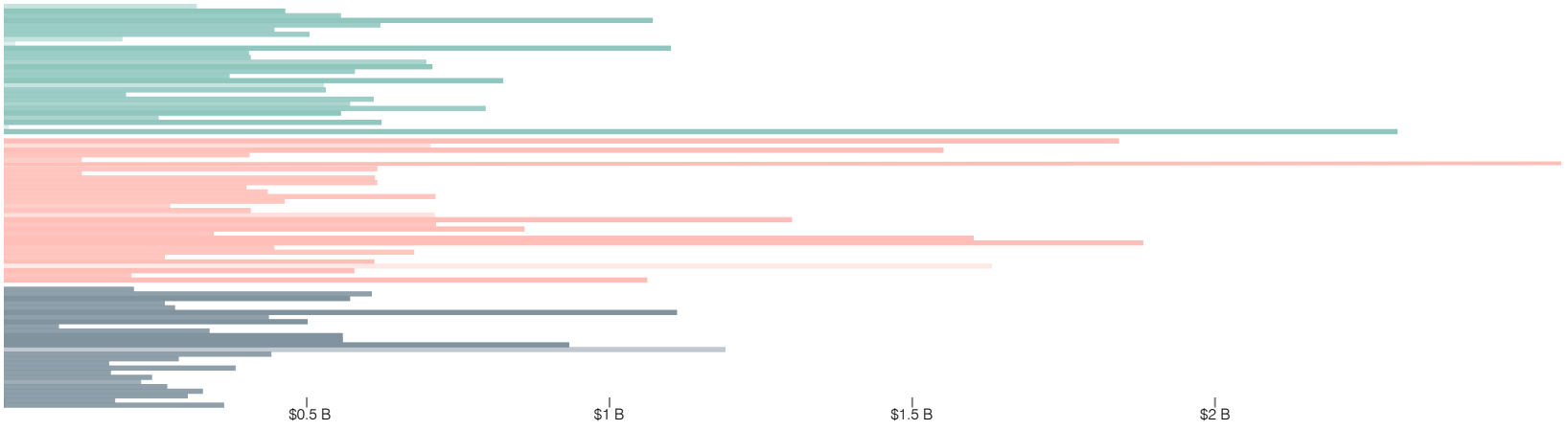
When looking at attendance numbers from the 21st century, it may surprise some that the six oldest stadiums in the United States are actually in the top half of their respective leagues. Even with other facilities having more modern amenities, these facilities and their history is something that other stadiums don’t have. The franchises that utilize these facilities are also valued highly compared to others, who have recently expanded or moved into new facilities. One could not argue that older stadiums are not as successful financially because all the data shows they are just as successful if not more successful than modern stadiums.

C101

"Stadiums Are Huge Finances That We Make a Priority in Our Society"

Stadium Construction Costs in the United States



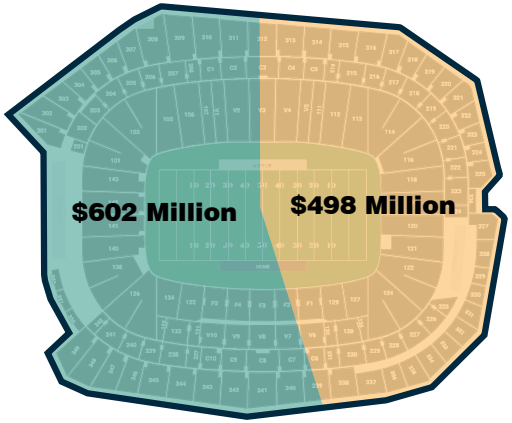


Stadiums are billion dollar investments. These facilities are able to house millions of people within year span. Everything is made to be at the top level from playing surface to fan luxuries. The construction of the facilities take years to complete, and the time and effort to find a successful location adds even more to this process. To only use of stadium for roughly 32 years doesn't seem to be enough to logically understand why these investments are being made. Stadiums can have large financial gains to areas, but many times the plans to see those gains take 30 years to happen. So many stadiums hardly reach that point in success before it has been abandoned and left to sit. These financial investments do not simply vanish away when no longer used; the stadiums usually sit abandoned for years, taking space and money away from other parts of the city.

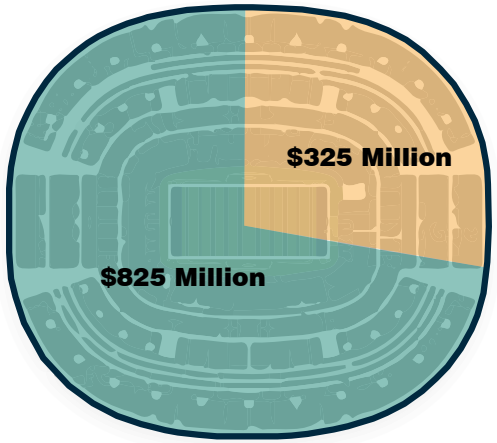
C102

"If the Public Is Investing, What Are They Getting Out of It?"

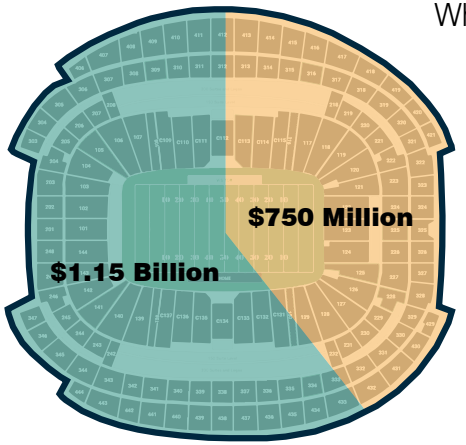
Private Vs. Public Funding of Stadiums



U.S. Bank Stadium
Minneapolis, Minnesota

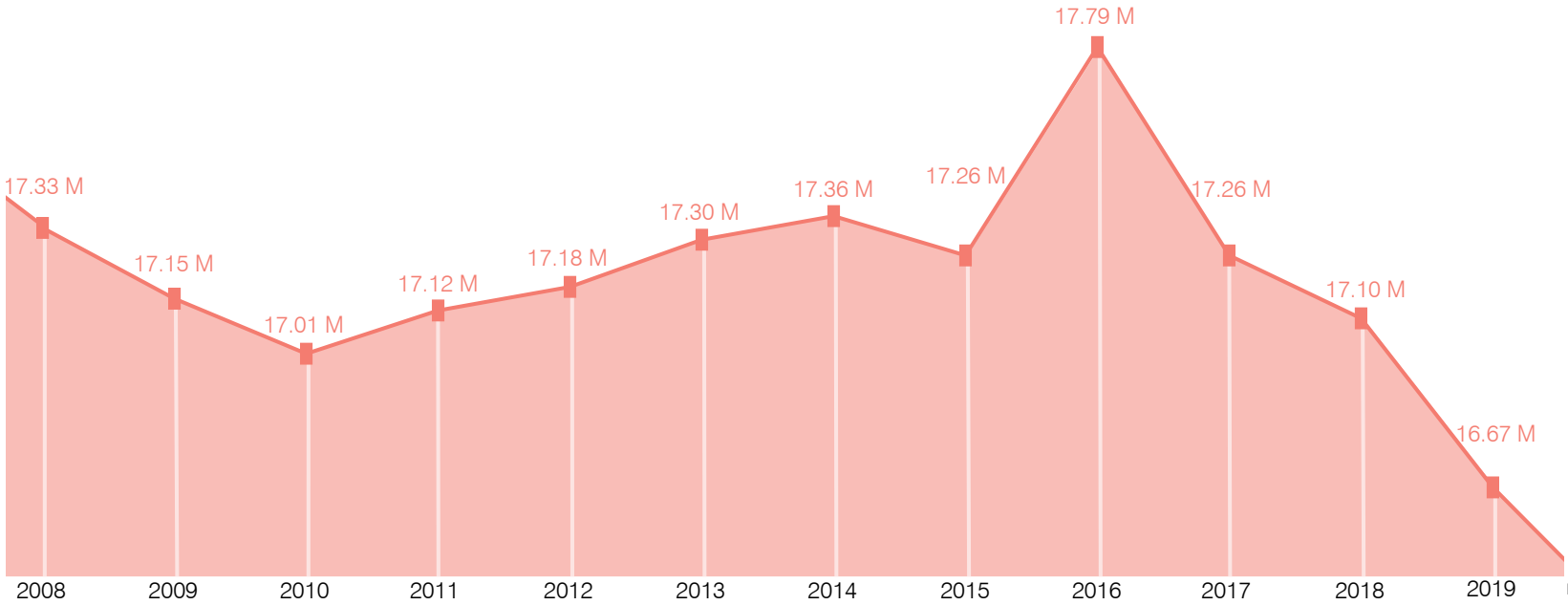


AT&T Stadium
Dallas, Texas



Allegiant Stadium
Las Vegas, Nevada

Private Funding Public Funding

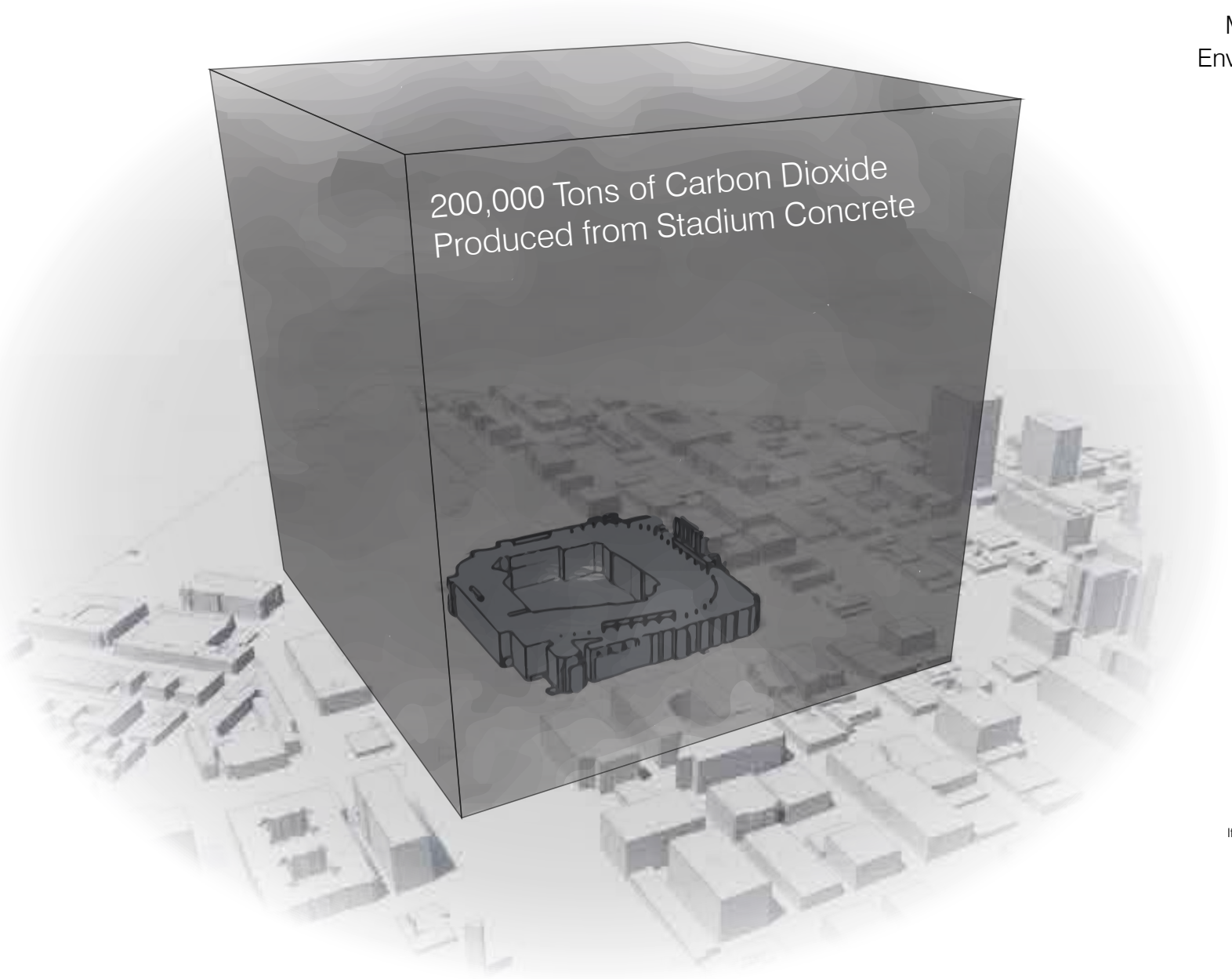


NFL League Attendance

Stadiums are typically paid for by a combination of public and private funding. What many people never realize is that even if they do not use the stadium, they can still be paying for it through their local taxes. Stadiums, such as U.S. Bank Stadium in Minneapolis, are built with an agreement from the local government that the income tax from the surrounding area will be used to help finance the city's stadium. In the case of U.S. Bank Stadium, this agreement is taking 28 years worth of income tax from the surrounding area to finance the facility. Date shows that attendance at professional sporting events has been declining over the past 5 years, making it even more difficult to justify constructed large stadiums. These people may not be impacted by the stadium, but they are constantly forced to finance these venues due to living proximity to stadiums.

D100

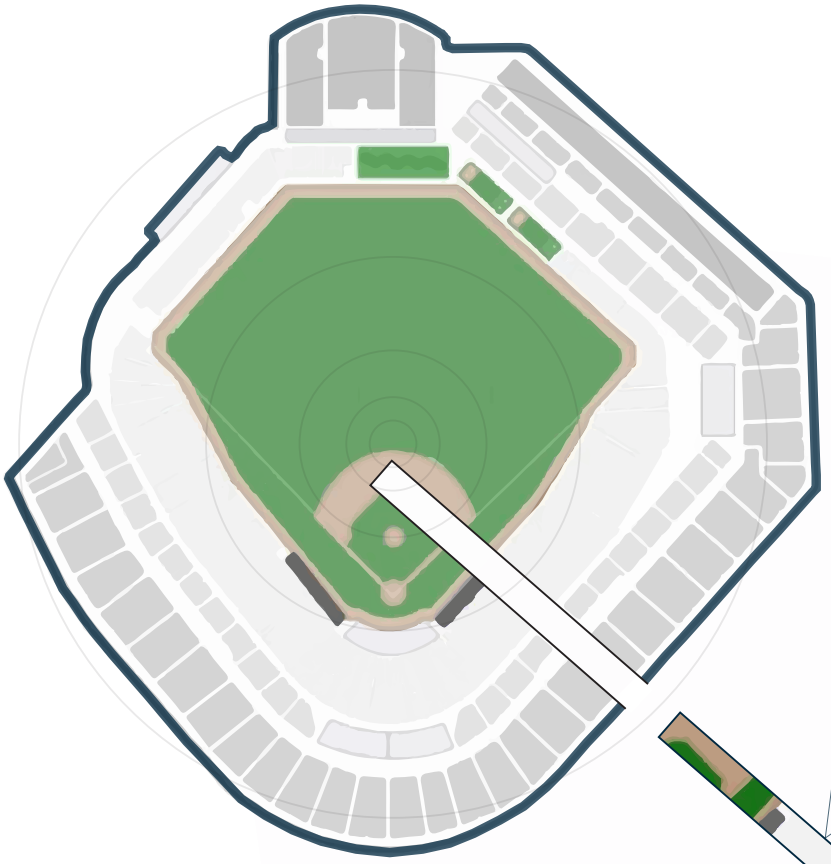
“Traditional Stadium Materials Have Large Environmental Impacts”



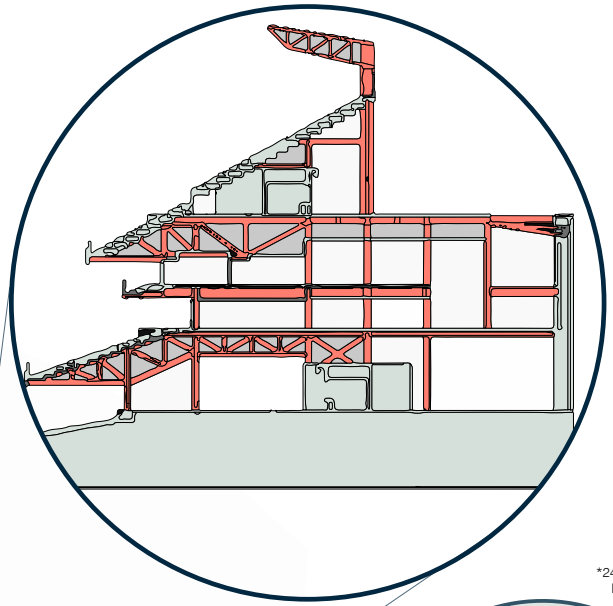
If you were to take the amount of concrete used to create Coors Field in Denver, you would find that it would create over 200,000 tons of carbon emissions. Concrete is a largely used construction material that produces large amounts of CO2 when manufactured. Concrete can be found to make over 75% of stadium materials, due to the strength of material and cost. However, our cities are filled with concrete that people do not even suspect is adding to the dangerous amounts of carbon emissions within the urban areas of the United States.

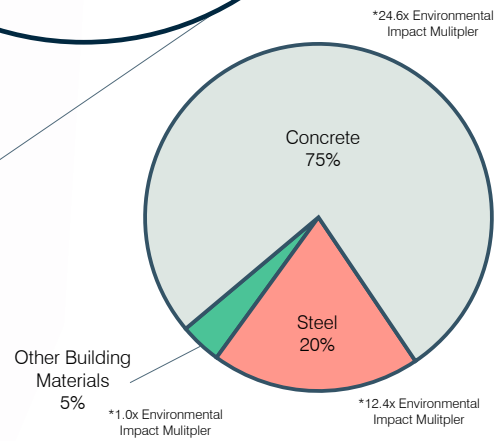
D101

“What Are Traditional Stadiums Made Of?”



Coors Field
Denver, Colorado

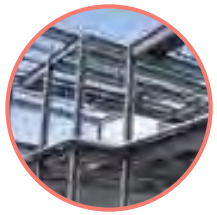


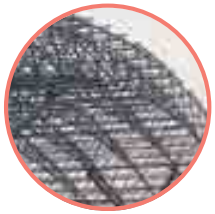


When dissecting Coors Field, there are large amounts concrete and steel being used to create walkways and seating areas. These two materials are most commonly found throughout stadiums in the United States, today. The ability to use precast-concrete and steel framing makes the construction process quicker. Other materials such as brick, stone, and stucco are usually used to create the exterior facades of these structures, but stadiums are being built to be able to withstand thousands of people at once.

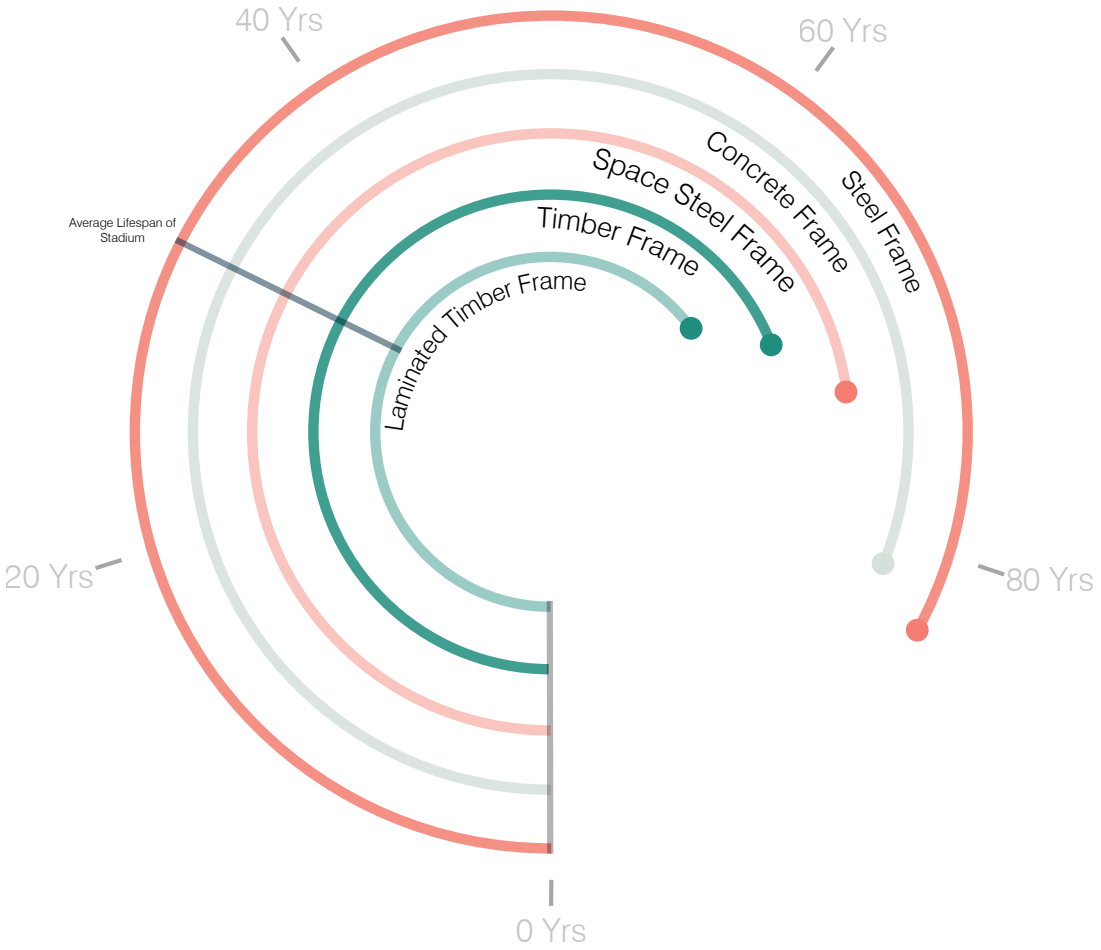
D102

"There A Sustainable Construction Options That Double Stadium Lifespans"

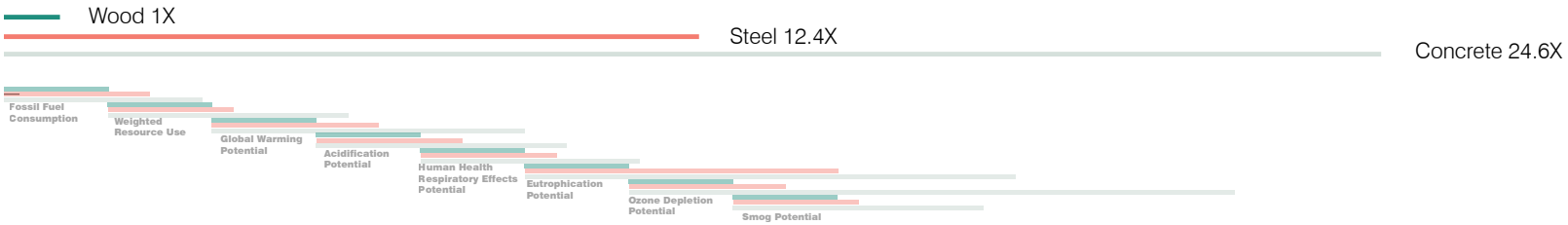




Life Expectancy of Building Structures



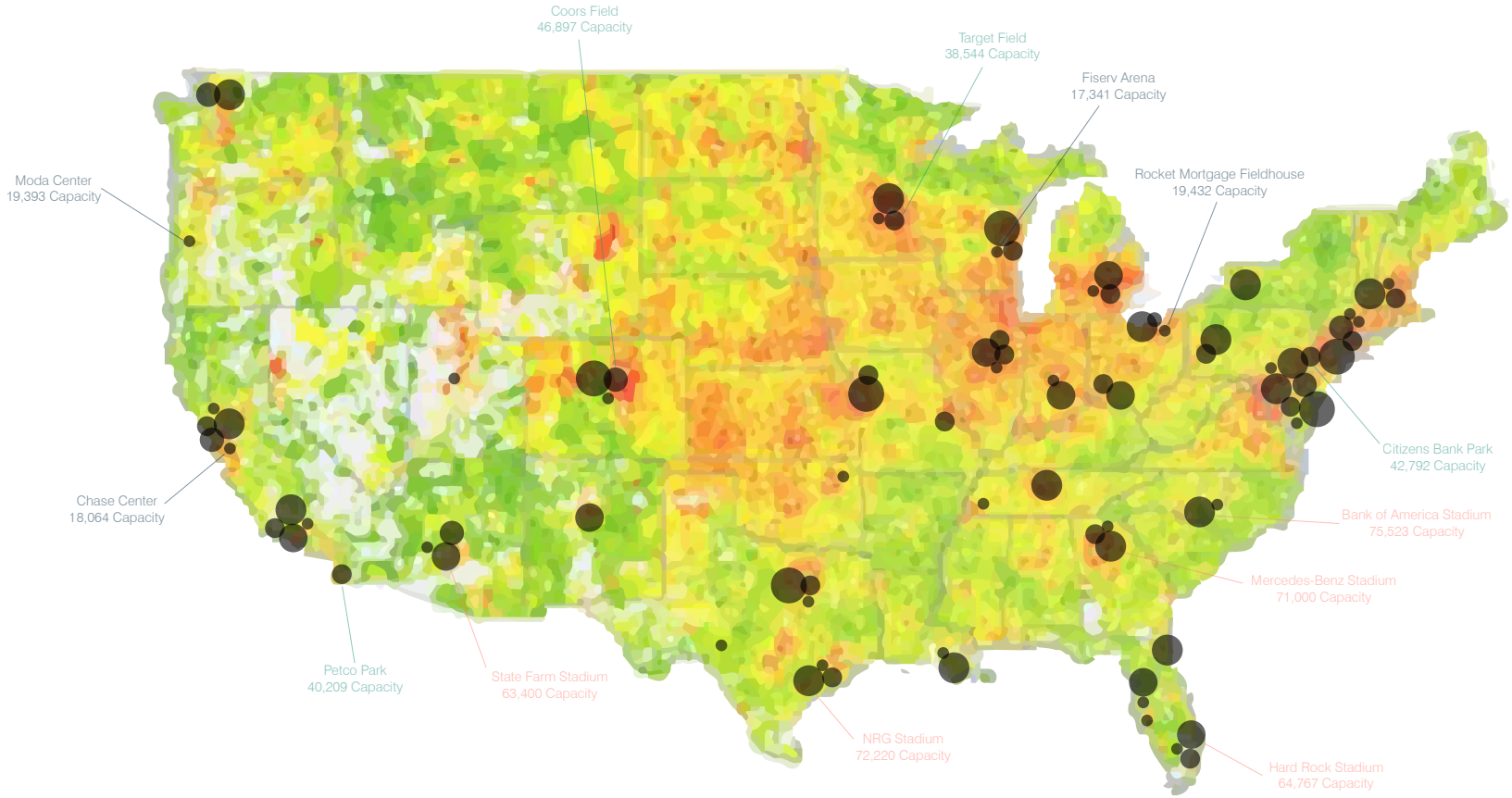
Environmental Impact Multiplier



Concrete and Steel are more commonly used in large urban structures due to the belief that these materials are stronger and better equipped to last overtime. Data of material lifespans shows that wood timber framing is still able to last 60 years while having almost 25 times less impact on the environment than concrete. If stadiums are only surviving for 30 to 35 years before being closed, why would we use a material that lasts close to 80 years and has a large impact on our environment? If we cannot make our stadiums last more than twice the average lifespan, there are other materials that could be used to create these venues, without having such a large environmental impact.

D110

“Stadiums Are Located in High Carbon Emissions Areas ”



Metric Tons of CO2 in Area Code per Year

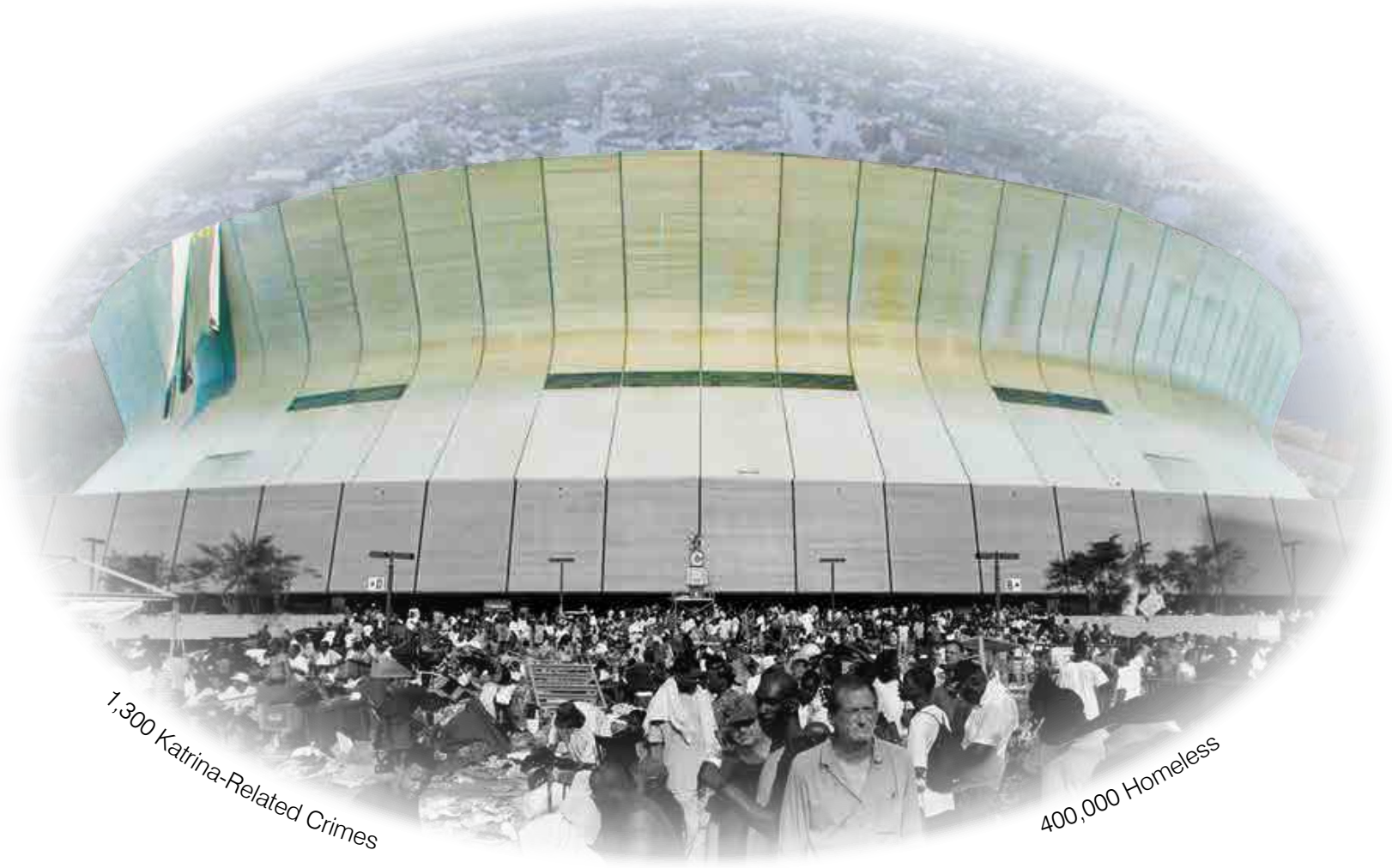
40 60 80

CoolClimate Calculator - coolclimate.org/maps

When looking at the amounts of CO2 across the United States, most of the “hotpot” areas come from large urban areas. Within many of these areas, there are a large amount of stadiums. These facilities have the opportunity to be constructed in a way that can be a strong influence in these areas. Stadiums have large environmental impacts, and it would be an injustice for these facilities to not take advantage of their opportunity to advocate for a cleaner future.

E100

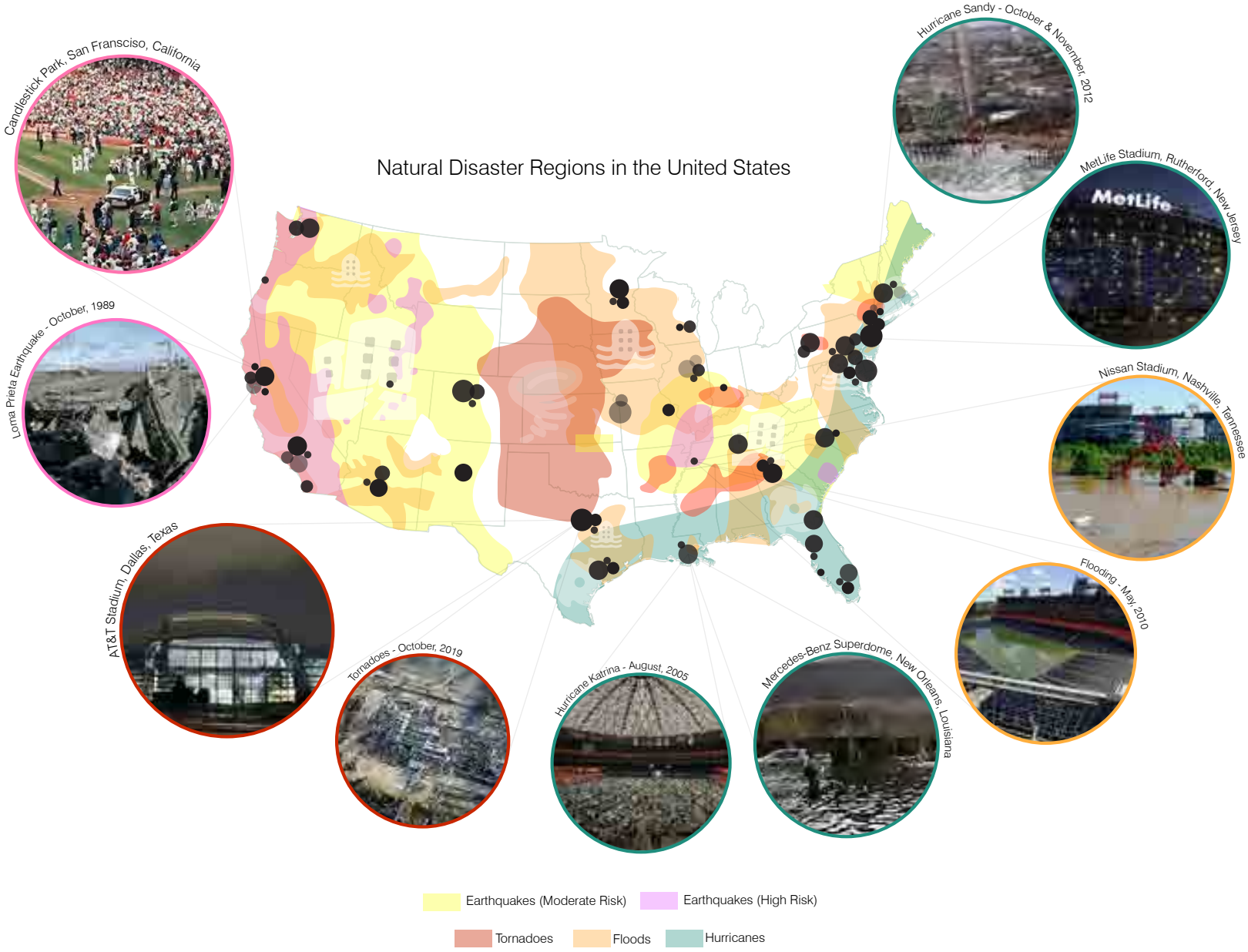
“Stadiums Should Be Safety in the Storm”



Hurricane Katrina hit the Southeast coast of the United States during 2005; many lost their well-beings, homes, or lives by this catastrophic event. In New Orleans, Louisiana, people tried to utilize the Mercedes-Benz Superdome for protection during the storm, but the venue was unable to properly help these people in need. There were large breaks in the roof of the Superdome that allowed for large amounts of rainwater to flood into the stadium. People were seeking an area for peace and rescue during Katrina, but there was large amounts of looting due to lack of security. Natural disasters bring serious damage and loss to communities, but stadiums have an opportunity to be constructed in a way to be apart of the resiliency plans to natural disasters, giving people hope during these horrors.

E101

“Stadiums Are Placed Within Natural Disaster Areas”



Across the United States, there is a variety of disasters present in different regions. Stadiums could be built to be resilient to certain catastrophes within their region. The Earthquake in Oakland, California , during 1989, had the opportunity to kill thousands of people who were in Candlestick Park, but the stadium infrastructure had been reinforced, not 6 months earlier, to be able to withstand any movement. Stadiums can be places for people to seek protection during storms. These facilities have a social justice to fulfill with those in the surrounding area, and part of that justice is to be a source of protection.

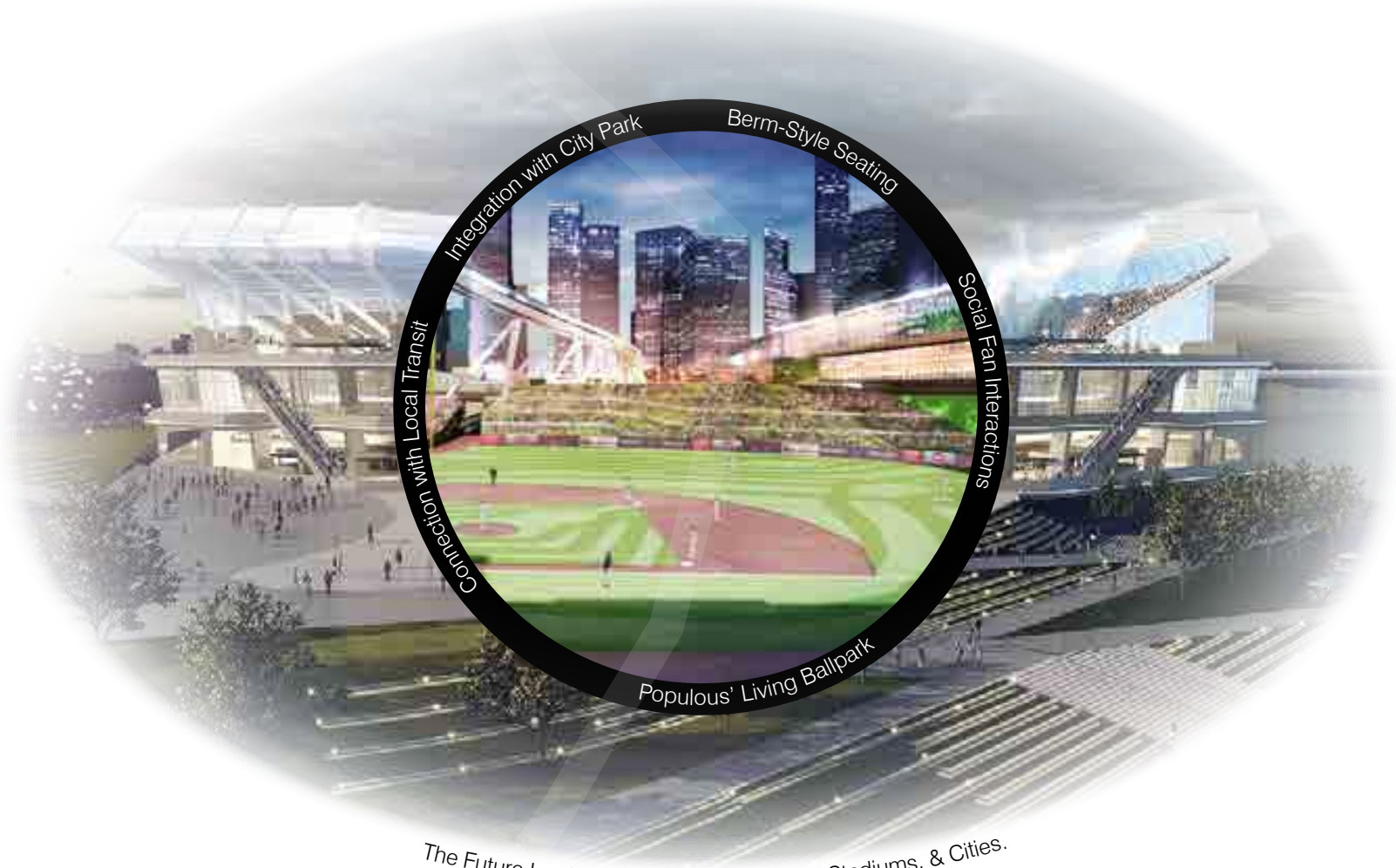
F100

“Today’s Stadiums Can Only Go So Far”

Data shows that many stadiums, within the United States today, will not be able to last over the next 15 years. These financial investments are going to waste by not being a sustainable resource for our urban areas. With the model for stadiums, there is no way to justify these large public investments into facilities that will never be used by locals for more than sporting events. The stadiums set empty, decaying away in world full of issues that have no solution. There has to be more to these pieces of architecture that brings new life and sustainability to this field, or it will continue to be a cycle of decaying and devastation to our cities and people.

F110

“The Future Is Stadiums Being More Than Just About a Game”



The Future Is a Harmony Between People, Stadiums, & Cities.

Sports, as a whole, have a large impact on our society. Their facilities need to be promoting and leading us to a bright future. A future where stadiums are not just places people will visit once a year, a month, or a week. These structures need to become an everyday part of our urban areas. There can be Justice, Jobs, and Decarbonization from these stadiums. We can have a future where stadiums are more than just places for sporting events, but they are also places to vote, to gather, to administer vaccines, to seek shelter,to celebrate victory, and to prevent tragedy. Stadiums have a responsibility to be a growing part of our future, and there is promise in seeing these stadiums become more than just about a game.