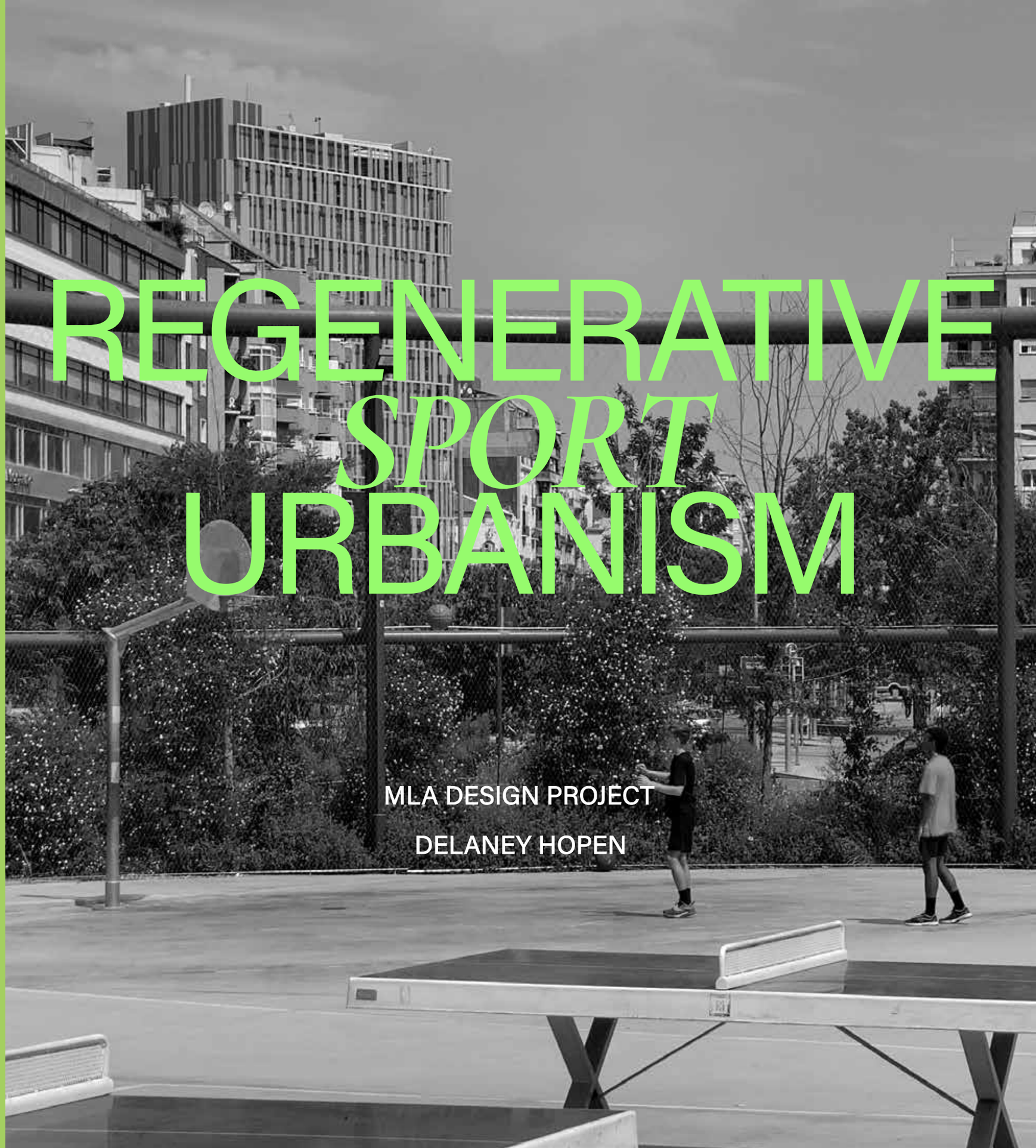


REGENERATIVE *SPORT* URBANISM

MLA DESIGN PROJECT

DELANEY HOPEN

"We acknowledge that we are here on Kalapuya Ilihi – the traditional Indigenous homeland of Kalapuya peoples, who were dispossessed of their Indigenous homeland by the U.S. Government and White settlers over several years, but most notably in Treaties between 1851 and 1855. Kalapuya people were forcibly removed to what are now the Grand Ronde and Siletz reservations, and are now members of Confederated Tribes of the Grand Ronde Community of Oregon and the Confederated Tribes of Siletz Indians, and continue to make important contributions in their communities, at UO, and across the land we now refer to as Oregon. We share this information out of humility and respect for this Indigenous homeland, and for the Indigenous peoples who continue to live and thrive in what is now called the State of Oregon."

I would like to acknowledge that my site selection is located on the traditional land of the first people of Seattle, the Duwamish people past and present and honor with gratitude the land itself and the Duwamish Tribe. It is on the shared waters of the Coast Salish People of Western Washington, most specifically the Duwamish and Suquamish. I first wanted to start off with a land acknowledgment identifying that we were visitors on the stolen land of the Kalapuya people, Grace's presentation was amazing and I hope everybody got the chance to see it. I also wanted to take a moment to acknowledge that the site that I'm choosing to work on is located on the traditional land of the people the Duwamish and Suquamish people. This land is connected by shared waters of the coast Salish people. I also wanted to share a program the tribe is running called Real rent Duwamish where you can choose to dedicate $54 a month symbolizing the 54,000 acres of homeland that the Duwamish Tribe signed over to settlers in 1855.

PROJECT STATEMENT

INTRO

LANDSCAPE ARCHITECTURE HAS PLAYED A ROLE IN HOW WE DESIGN FOR DENSE URBAN ENVIRONMENTS FOR THOUSANDS OF YEARS. CREATING PUBLIC SPACE FOR SOCIAL COHESION, AND OPEN SPACE FOR PUBLIC EXPRESSION IS A VITAL COMPONENT OF THE URBAN FABRIC THAT IS THREATENED DUE TO ENVIRONMENTAL AND SOCIAL CHANGES PROVOKED BY MODERN LIFESTYLES. SPORTS HAVE BEEN A TRADITIONAL INVESTMENT BY GOVERNMENT LEADERSHIP FOR THEIR ABILITY TO PROMOTE COMMUNITY CONNECTIVITY, AND BETTER THE HEALTH OF THE POPULATION.

INTRO

REGENERATIVE SPORT URBANISM, TAKES INSPIRATION FROM EUROPEAN MODELS OF URBAN REGENERATION USING THE ATHLETE TO DRIVE ECONOMIC DEVELOPMENT. NOW MORE THAN EVER, PROTECTING OPEN SPACE, AND FORCING SPORTS IN THE FACE OF THE URBAN USER MUST BE A HIGHLIGHTED OPPORTUNITY OF URBAN DESIGN, TO ENSURE QUALITY OF LIFE WHILE FIGHTING THE CLIMATE CRISIS AND IMPROVE AMERICAN HEALTH.

INTRODU

To understand how this project developed, it's important to highlight the collision of a few main factors regarding Urban Design and Sports history before I define my project. Sports are a product of leisure time, and although they have been a training activity or folk ritual, sport itself has been an exercised right for those that can afford to play in America. The rise of sport is linear to the rise in urbanism in the U.S. due to consistent working hours, and assembled church/employer teams to help build comradery in new way of life in the city. Businessmen in the 1970's-80's saw the energy sport brings to people and communities, and the development of sports medicine displayed a huge opportunity for commodification. Participatory joy is overshadowed by privilege and spectatorship today, and money did that. Urban designers now hold a greater responsibility during the climate crisis to build resiliency in our public infrastructure and place making that can help.

My cohort was prompted in our 2nd year of our master's by instructor Rob Ribe to begin collecting research topics we liked. I chose three main pieces and one case study: an article about the psychological benefits of viewing blooming poppies that elderly folks experienced in China, the long-game that sports arenas and stadiums play in brown field remediation, World Health Organization data on obesity and heart disease, and the CopenHill Ski Slope and 24-hour Waste Incinerator by Bjarke Ingles. To me these topics were all so logically connected.

I wanted to use Landscape Architecture's ability to promote green social space to better city health, help clean-up some of our human mess, and make people move together because it's good for them.

That summer of 2022 I studied Urban Design in Barcelona with my project advisor Ignacio López Busón, and Architect Philip Speranza, and learned about the power of urban design and planning. Barcelona has a long history

INTRO

UCTION

of systems thinking, with the design of the grid by Ildefons Cerdà in the 19th century, and proposed Superblock model by Salvador Rueda in 1987. Barcelona Superblocks are a design goal that revolves around taking back the street from the privately owned vehicle and making the street public space. The city has struggled with overcrowding and environmental degradation with severe heat waves and air pollution thanks to climate change and tourism in the area.

This model of cutting off streets grew businesses because of pedestrian travel, decreased noise pollution in some areas by 4 decibels, has decreased private vehicle use by 92%, and continues to provide more habitat for local species through ecologically diversifying street planters and trees. Superblocks make public space when there is no room for it, a unique compaction and density issue of Barcelona, but if we were to apply this to the United States what would this look like?

This city's vibrant community is something that cannot be translated directly to the U.S. for so many obvious reasons, but there were similarities that I felt with my volleyball community. I went on a run during my last week in the city, and finally found some stairs to do some sprinting. An older woman stopped me and was speaking in Catalan about how horrible my posture was, I blame the studio hours on a stool and computer. She was so kind and warm, and told me she had been a runner for 30 years. Sport community is everywhere and knows no language. This interaction only reiterated why I wanted to start thinking about this project.

After this I started to break down design goals and understanding my process as the athlete; stairs to cross terrain and topography were a sporting instrument we would use in college that required no money for training. One of the most important sparks for design occurred while walking along the diagonal. If you hang out long enough, you will find local runners running towards the transit in their path. Why? We design these transit areas with grass

INTRODU

lawn underneath, a tactic to help indicate a vehicular line (ironically, so we stay out of the way of the tracks), to help potentially collect runoff and feed it back into the aquifer as it runs off adjacent hardscapes, and then plant large canopy trees on the edges so waiting for transit can be more pleasant, and while keeping that understory lawn alive. This is what an urban planner sees.

The athlete sees: I can run in the shade so I won't overheat or get sunburnt, the air will be a little cooler from the trees underneath, and now my knees won't hurt because I can run on shallow flat lawn, I'll just hop out the way once I see the train coming.

Not genius just logical, athletes are efficient.

Living in Barcelona for 3-months prompted conceptual thinking about how the ground user in a city brings energy as a pedestrian. Throughout my life as a collegiate athlete and growing up so intertwined in sport, I've been able to witness all the positive biproducts that long term sport participation has had on my family for generations, the communities and resilience it provides throughout all cultures and people, and the longevity of health for the individual.

In the same way I grew up watching my dad go to pick up basketball games after work at our local gym and watching my grandparents golf with their best friends from high school every weekend for 30 years, I began to consider just how tight athletic bonds are and they began with place. I owe so much of my own experience to my family, and the culture they provided that valued sport. I played because my family did, and it was always in my face, so what if sport was in the urban user's face for participation, not for spectatorship? It's a very different conceptual model than the American Sport industry with the media that exists on our devices, we must let streets be our stadiums arenas courts and fields.

INTRO

UCTION

Sport and exercise help in relieving anxiety, depression, lowering risk of heart disease and obesity, improves problem solving skills, makes you work as a team, embraces competition, improves focus abilities for individuals with ADHD, assists in building individual self-confidence, strength building, practices communication skills between teammates, builds leadership... shall I go on?

While spending the summer alone on foot walking around Barcelona, Dubrovnik, London, and Oslo, I explored different literature including Richard Louv's Last Child in the Woods, and a portion of Li Qing's Forest Bathing: How Trees Can Help You Find Health and Happiness in the collection Nature is a Human Right edited by Ellen Miles, and ironically felt anxiety begin to renter my body as a pedestrian by the time I was walking to Big Ben from my hostel, after every walk previously felt like a hike in Dubrovnik outside the old city. Safe to say, Barcelona taught me a big lesson about dense urban design that London could benefit from, Dubrovnik's rocky terrain is just a different model, and Oslo felt like home in Seattle.

Richard Louv touched on the impacts of our lack of freedom to explore the outdoors is having on our American kids. Focusing struggles begin at the age of 3, with medications for ADHD being prescribed as early as pre-school. Li Qing touched just how much of our animal is still left in us, and that when all our senses are only experiencing greys and hardscapes of the urban environment our instincts that crave color fruit on a tree, or flowers, psychologically is no wonder we are struggling. We are at cross-roads where our urban environment must be more than the urban environment, but a park, an urban forest, and a playground, and I think a sport facility. Reading about these topics helped me gain awareness as I moved throughout these cities. When I got back to the U.S., where I drive my Ford Truck everywhere and we work more than we live, I began assembling my project Regenerative Sport Urbanism.

INTRODU

Regenerative Sport Urbanism is the runner on the train lines, Hoopfest in Spokane that brings in 42 billion dollars every June, my brothers making a game of foursquare out of the square slabs of driveway pavers at our family home that eventually recruited more friends, the set of stairs I've ran by the beach since I was 15, the gym where I met my mentor Amoreena Miller a proud and successful woman in Architecture in Seattle. I don't view this project as a 22-month temporary exploration, or a box to check for a master's degree but rather a long-term work that revolves around the positive influence urban design and planning could impose on human health in cities if we as designers saw the potential that everyone at this University sees for Sports Marketing and that flashy Swoosh symbol.

This is Draft 1.0

INTRO

UCTION

01 RESEARCH

This phase is composed of urban design research at the global scale. This section seeks to understand the differences between the way European cities have approached design public space, and sports to promote public health. In turn, this impacts cultural opinions and familiarity with specific sports relating to climate and geographic location (i.e. distance from water bodies, mountains, fields, etc.). This research paints an overall picture of how cities have controlled public relationship with urban exercise facilities.

02 FRAMEWORK

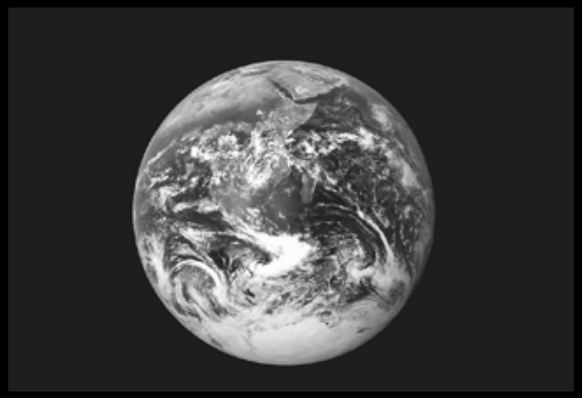
Phase two zooms in to city scale, applies the research and understanding of various major cities by selecting outliers through statistical analysis. Successful European cities that have created sports culture, have a tradition of valuing certain sports, or excel in urban design can are identified and used as baseline measurements. These baselines are then compared to one major city in each of the lower 50 states in America.

Statistical analysis then feeds into spatial analysis. Geographic Information Systems (GIS) are then used to understand how the physical organization of the city plays into or against this statistical analysis. This creates a dual-supported narrative of how each city is scored and ranked in comparison to one another aimed directly towards public health and exercise.

03 DESIGN

The last phase is now provided with specific problems, locations of pressure points within the city system, as well as areas of opportunity. Design application considers the uniqueness of the city, and builds into existing culture and infrastructure, while it's main driver is accessible sports, exercise, and community cohesion in the landscape.

A METHODOLOG



01

02

03

WHO DESIGNS FOR *SPORT?*

WHO PLANS FOR *SPORT?*

MADDEN PARK CHICAGO IL , 1906

HISTORY

WHO DESIGNS FOR *SPORT?*

To understand the history of sport it helps to understand how we got here to the US and our $39 billion industry that it currently is.

Sport as a folk activity, traditional ritual, and/or strength and endurance training as some sort of game has been embedded into every culture, but the industry really started to grow into our modern day beast with the rise of urbanism.

This linear trend of people moving to cities to have consistent working hours allowed for more flexibility and leisure time more time for self-care more time to have fun after studying the history of sport for the public user the city of Chicago is an incredibly prominent example of what I would view as the weaponization of sport.

During World War One there was an influx of people moving out of the South and into the cities North like Chicago. It became rapidly overcrowded and there wasn't enough quality public space or quality living space for people who weren't white or wealthy. One of the best part of sport is the flexibility that openness carries for the athlete and now a pick up game can begin with the bare minimum.


IDA B WELL HOUSING PROJECT PLAYGROUND HTTP://WWW.LOC.GOV/
NO. 1 MAP SECTION
934. *Restrictive Covenants.* Deed restrictions are apt to prove more effective than a zoning ordinance in providing protection from adverse influences. Where the same deed restrictions apply over a broad area and where the restrictions relate to types of structures, use to which improvements may be put, and occupancy, better protection is afforded. Where adjacent lots or blocks possess
MADDEN PARK CHICAGO IL, 1906

HISTORY

*"These sporting landscapes of hope **could** be a conduit for racial advancement and interracial cooperation, but they could just as easily become stark reminders of the various ways the North perpetuated and even exacerbated the racial inequalities that migrants had hoped to escape, hindering their full integration into and enjoyment of modern urban environments."*

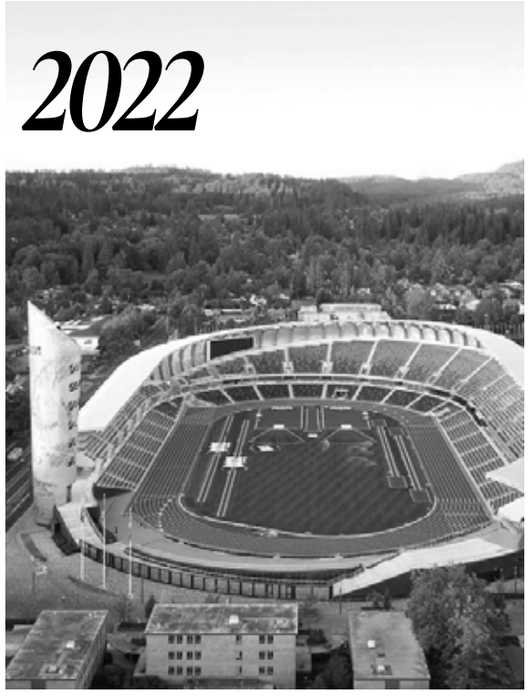
-Brian McCammack, *Landscapes for Sport*

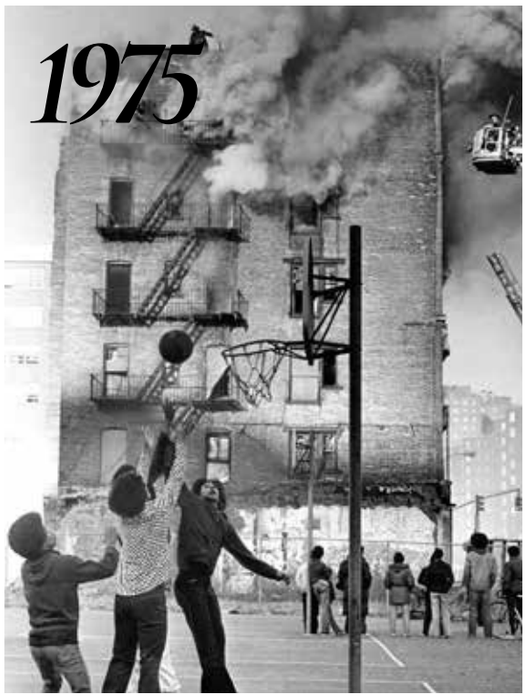
Sports in Chicago played a major role in finding identity in the landscape for the black community during a time of extreme separation and redlining let's seasonally it would get a little golden Chicago so now the environment played a role in providing a space for identity and the unequal access per conditions in existing field houses only permitted to use by white wealthy residents stressed and the lack of equity in a system that was strategically starving people of their right to gather. The tie people have to place was not only in poor condition, but would also be strategically stripped away by the impacts of seasonality. This systemic racism and access issue in planning our American cities is just as present today as it was in the 20th century.

America decided to sport in the 1970s only stressed in a rationale that the people that can't afford to play sport together deserve to and that if you can't you better be better than everybody else physically and performing as such. That's the only way you'll get quality access to a space.

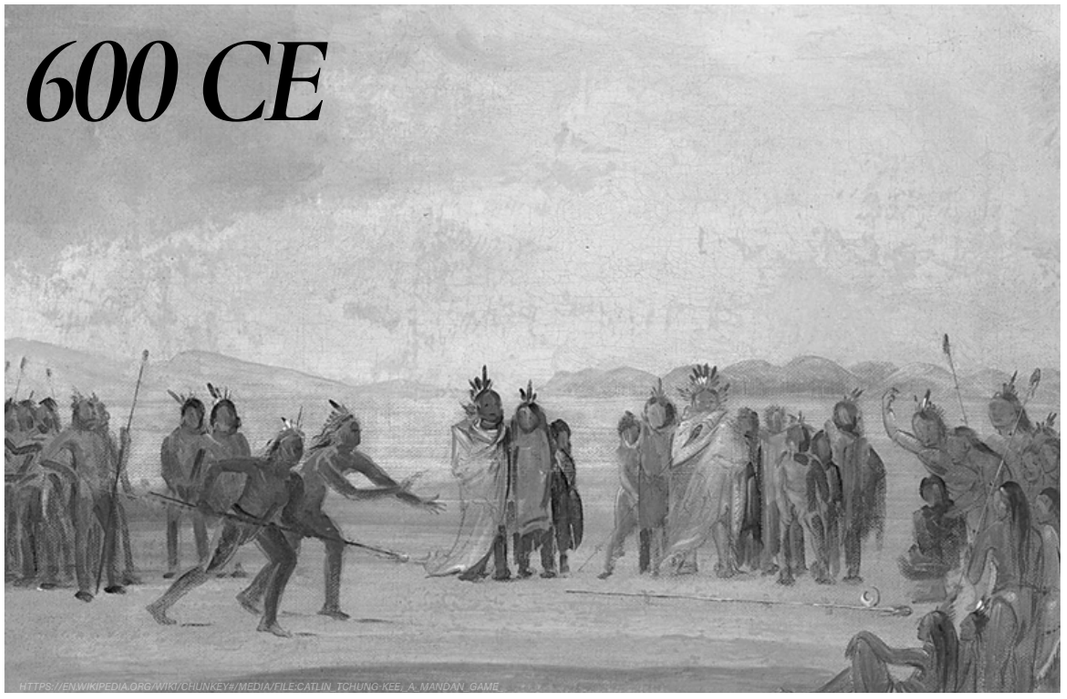
"The physical environment (i.e. nature and it's built forms) has been key to sport activities, which have been motivated by politics, recreation, amusement, and pleasure, camaraderie, and concerns for physical and mental health. ***Landscapes have been shaped and environments have been used for physical exercise and sport in all parts of the world at all times."***

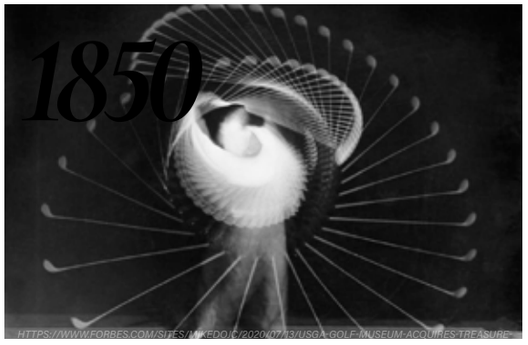
-Sonja Dümpelmann, *Landscapes for Sport*




1975


1700


600 CE
HTTPS://EN.WIKIPEDIA.ORG/WIKI/CHUNKEY#/MEDIA/FILE:CATLIN_TCHUNG-KEE,_A_MANDAN_GAME

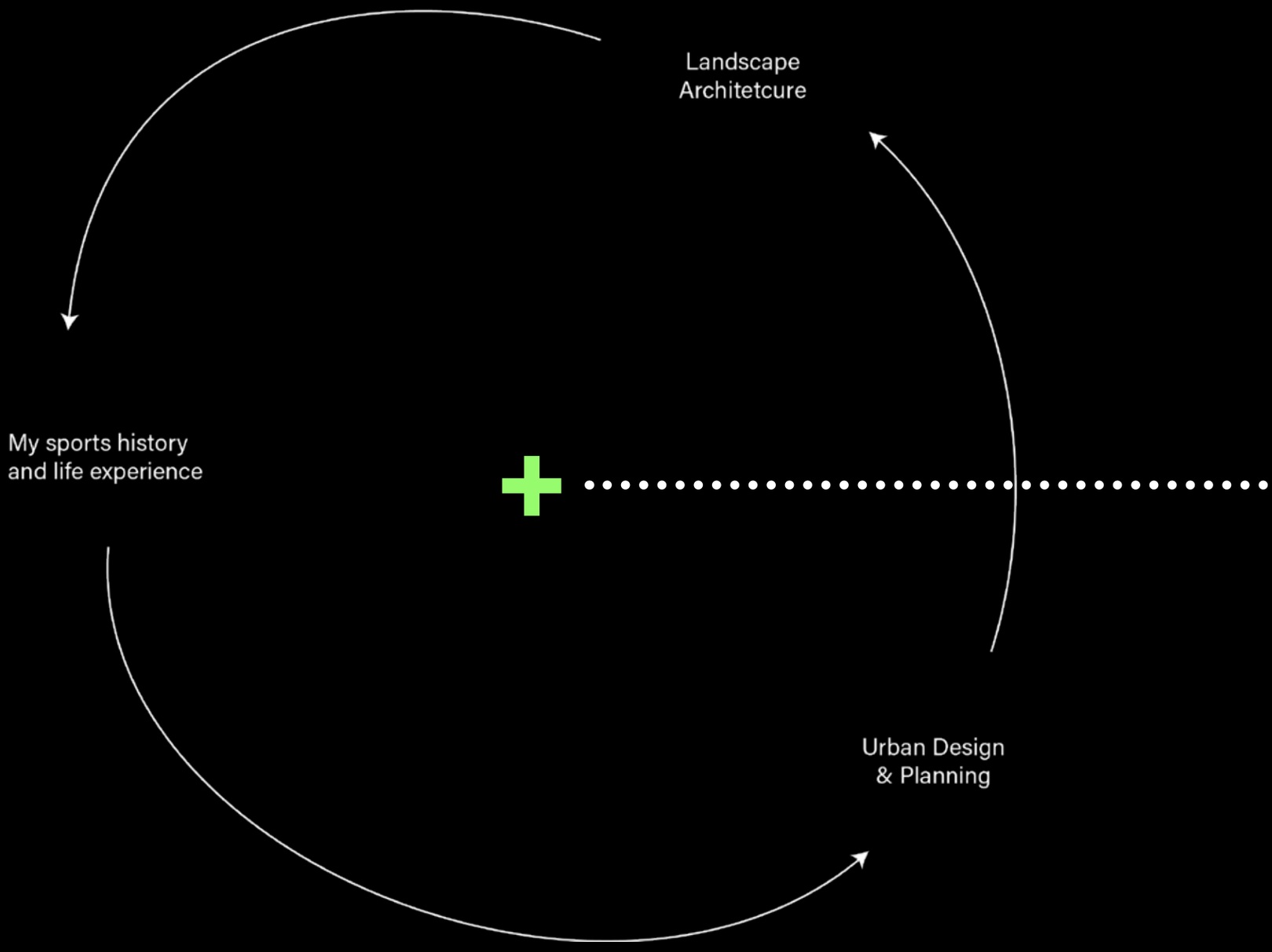

1850
HTTPS://WWW.FORBES.COM/SITES/MIKEDOLE/2020/07/13/USGA-GOLF-MUSEUM-ACQUIRES-TREASURE


1885

70% of kids stop playing sports by the age of 13."

-National Alliance of Youth Sports, 2021

70% of American kids stop playing sports in Middle school. This is a huge number that is really heart breaking to me, but I can honestly say I can see the impacts of this in my work coaching in the community. I think in a lot of ways we've made it this way and it's only getting worse because life is getting expensive the literature only scratches the surface of the reality of the situation that's really messy and complicated financially.


Landscape
Architetcure
My sports history
and life experience
Urban Design
& Planning

So from this my project regenerative support urbanism was born from the intersection of landscape architecture and the designers impact on placemaking the urban planners responsibility to create equitable opportunity and shared environments and my own lifelong love of sport and the impact I've watched it have on the lives of the individual.

REGENERATIVE *SPORT* URBANISM

HOW CAN A METHODOLOGY BE APPLIED WHEN DESIGNING FOR URBAN *SPORT* OPPORTUNITIES?

GOALS

- FIND LOCATION POTENTIALS IN A SPECIFIC SYSTEM
- BRING PEOPLE TO THE STREETS TO HELP LOCAL BUSINESS
- PROMOTE PERSONAL MOVEMENT
- ENCOURAGE AND PROVIDE SPACE FOR GROUP ACTIVITY

Temporary Urbanism	Highlights the importance of vacancy and underutilized urban space for various activities, events, and installations allowing for experimentation and adaptation.
Everyday Urbanism	Ordinary, daily activities of urban residents, which focuses on the needs of those activities in design.
Tactical Urbanism	Focused on grassroots and community-led initiatives that aim to improve urban spaces through low-cost, temporary interventions.
Messy Urbanism	Challenges the idea of neatness of orderly planning by embracing complexity.
Bottom-Up Placemaking	Inviting local communities into shaping urban environments, highlighting the importance of inclusive participation, collaboration, empowerment of residents in determining character and identity of their neighborhoods and public spaces.

URBANISM THEORY

REGENERATIVE

SPORT

URBANISM

Planning and designing with the thought of using public space for play, and considers how the system can support communal sport-placemaking and encourage outdoor exercise.

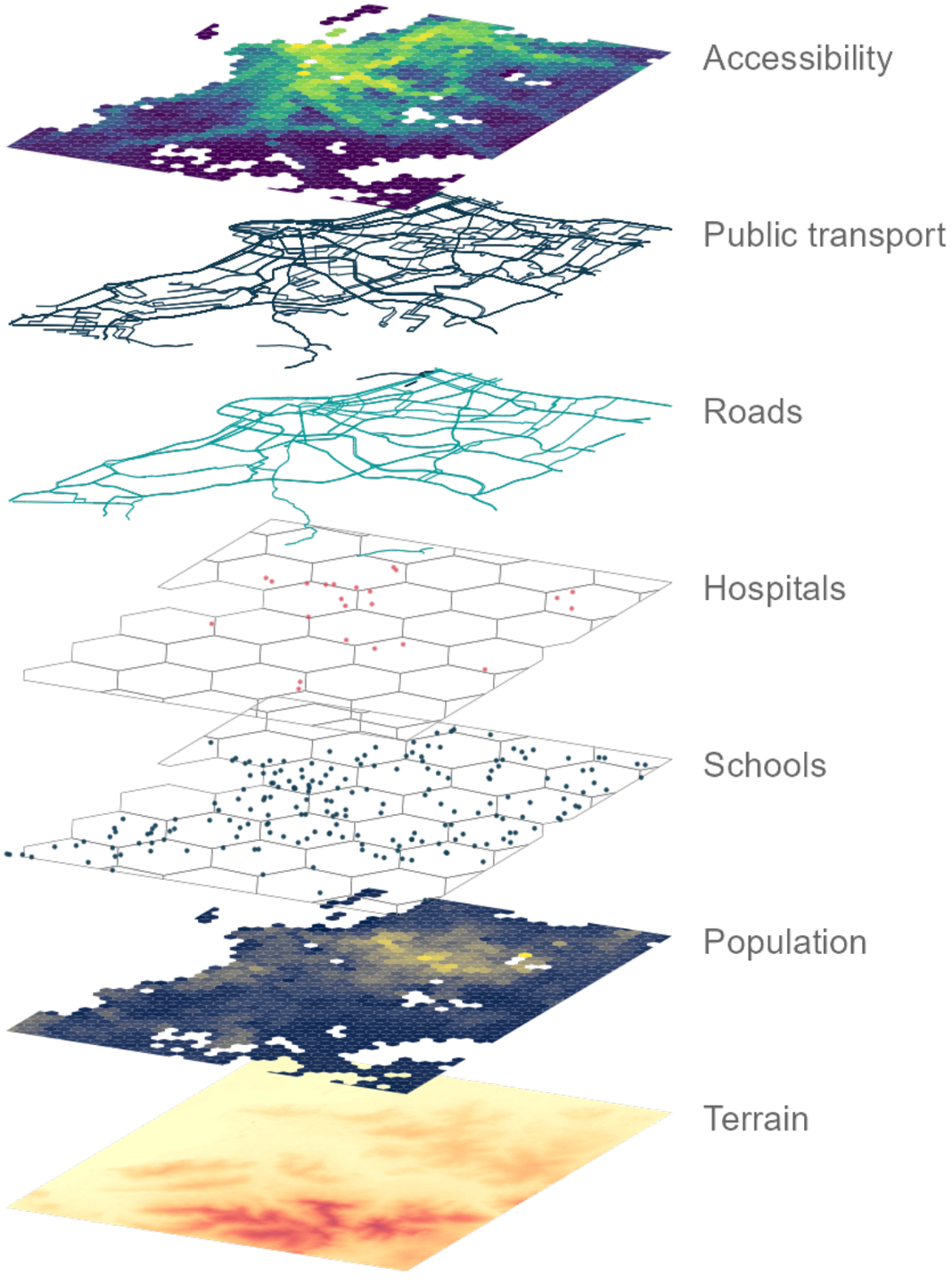


image by @UrbanDemog

GIS: Geographic Information Systems

The isolation of information and data tied directly to a location which can then be overlayed to understand the greater picture of the system. Commonly used via ArcGIS, and QGIS softwares. GIS analysis helps expose patterns in the landscape, sometimes but not always, as visible to human perspective-view.

WHY GIS?

BARCELONA GIS LAYERS

Through GIS analysis, we were able to filter different areas of life in the city of Barcelona. Income, Sports facilities including schools, NDVI Vegetation, Parks and green open space, and popular running paths tracked by runners using the app Strava. This data can help filter areas that have a lot of sports activities currently, and those that don't pertaining to socioeconomic issues, space availability, and the impacts of low green space in an urban setting.

Income

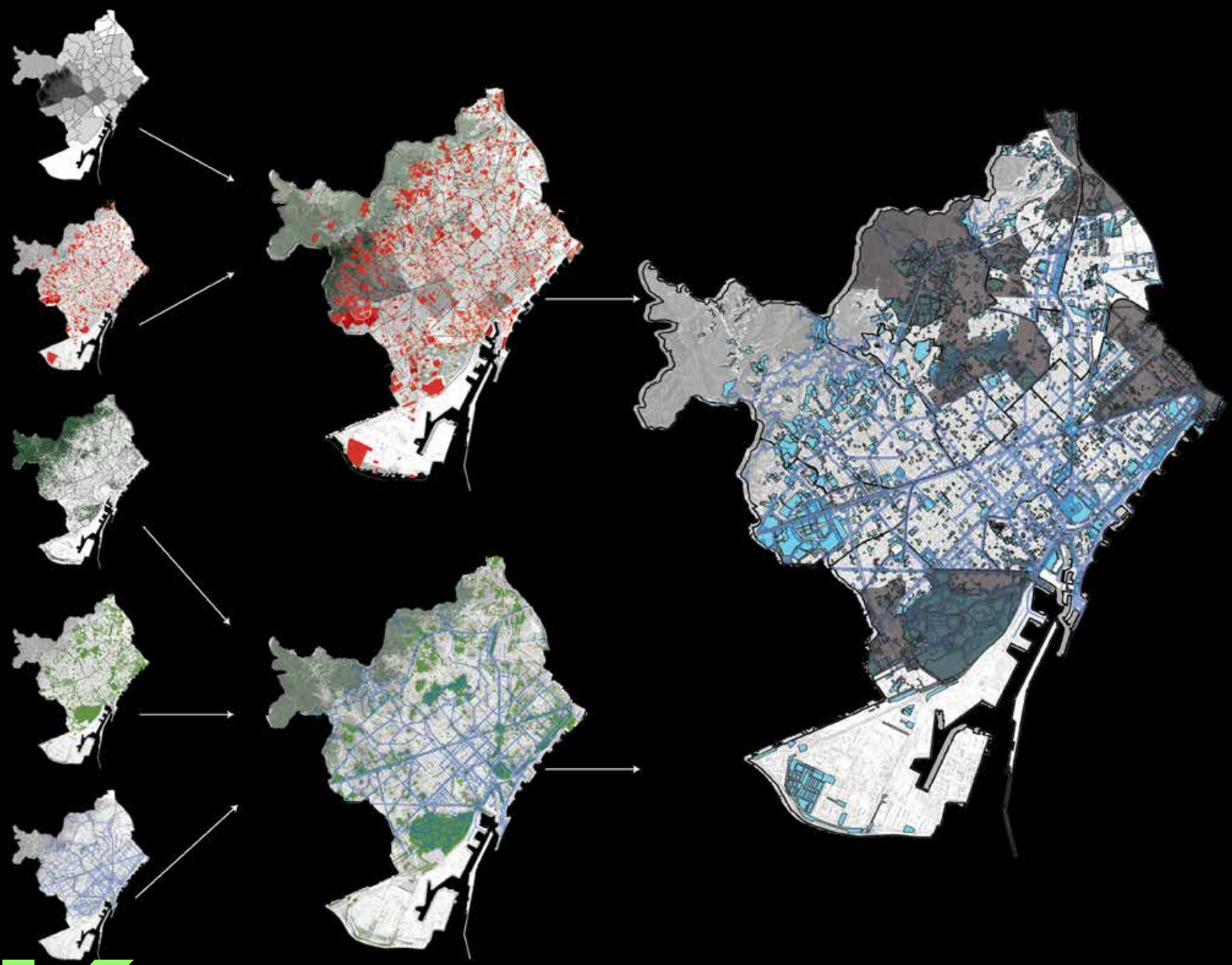
Sports Facilities

NDVI Vegetation

Parks

Strava Running

BCN FRAMEWOR



K

01

NATIONAL SCALE

1. SET SCALE
2. SET BOUNDARY
3. SIFT YOUR DATA
4. SUMMARIZE
5. ZOOM

02

CITY SCALE

1. SET SCALE
2. SET BOUNDARY
3. SIFT YOUR DATA
4. SUMMARIZE
5. ZOOM

DISTRICT SCALE

1. SET SCALE
2. SET BOUNDARY
3. SIFT YOUR DATA
4. SUMMARIZE
5. ZOOM

NEIGHBORHO

1. SET SCA
2. SET BO
3. SIFT YO
4. SUMMA
5. DESIGN

A METHOD

03

04

OOD SCALE

ALE

UNDARY

UR DATA

RIZE

OLOGY

So what you're seeing is a rough project map that follows the same repetitive process of four rounds of filtered data analysis at every single scale.

A METHOD

DATA TO LOOK FOR

1. ENVIRONMENT
2. ECONOMICS
3. DEMOGRAPHICS
4. HEALTH
5. INFRASTRUCTURE

03

04

The simplicity that was actually not that simple at all was that the same cycle of information was sought out at every single scale and it just looks a little different at each scale the environment, the economics, the demographics, the local health, and the infrastructure all contribute to access to quality sport and exercise space in an urban environment.

OLOGY

RESEARC

*PHASE **00**: SPORTS AND URBANISM*

CH

So to kick off the so-called simple and logical task I needed to get to know the beast I was working with I began researching a vast amount of topics pertaining to sports design urbanism landscape architecture and economics in January of 2022. These were some of the literature and data samples that were the most influential of my readings that I used in this process if you're interested in the intersection of sport and landscape I could not recommend more Sonja Dumplemann's landscape for sport book she edited it's so fun and it's so informative about just how much place for exercise connects to our society as it progresses. this topic is a rabbit hole so I could go on and on about it, but the most direction I received as far as design goals and guidelines I received from Daniel Casas Valle an urban design researcher and planner from Portugal that actually provided some public sport space design details that I will get into later, and stressed that sport space is always implemented as an architectural left over.

RESEARC

Sport, Education and Society

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/cses20

Where does environmental sustainability fit in the changing landscapes of outdoor sports? An analysis of logics of practice in artificial sport landscapes

Erik Backman & Daniel Svensson

Sports and urban development: an introduction

Geoff Dickson
La Trobe University, Melbourne, Australia, and
James Jianhui Zhang
University of Georgia, Athens, Georgia, USA

Anxiety and imagery of green space among athletes

REVIEW Open Access

2020 WHO guidelines on physical activity and sedentary behaviour for children and adolescents aged 5–17 years: summary of the evidence

Jean-Philippe Chaput[1,2*], Juana Willumsen[3], Fiona Bull[3], Roger Chou[4], Ulf Ekelund[5,6], Joseph Firth[7,8], Russell Jago[9,10], Francisco B. Ortega[11] and Peter T. Katzmarzyk[12]

Sport in the City

Active urbanism and choice architecture: encouraging the use of challenging city routes for health and fitness

Anna Boldina, Paul H. P. Hanel & Koen Steemers

To cite this article: Anna Boldina, Paul H. P. Hanel & Koen Steemers (2023) Active urbanism and choice architecture: encouraging the use of challenging city routes for health and fitness, Landscape Research, 48:3, 276-296, DOI: 10.1080/01426397.2022.2142204

To link to this article: https://doi.org/10.1080/01426397.2022.2142204

How American Sports Facilities Can Better Serve Their Communities

Contents lists available at ScienceDirect

Urban Forestry & Urban Greening

journal homepage: www.elsevier.com/locate/ufug

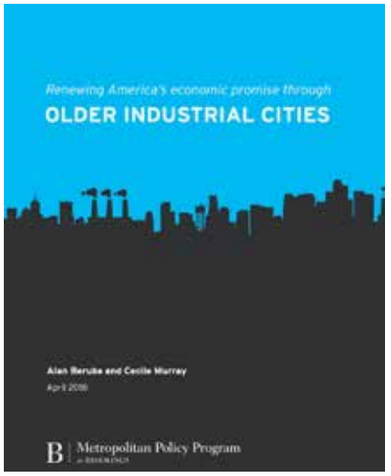
Short communication

An investigation into the synergistic wellbeing benefits of greenspace and physical activity: Moving beyond the mean

Christopher L. Ambrey
Cities Research Centre, Gold Coast Campus, Griffith University, Queensland 4222, Australia

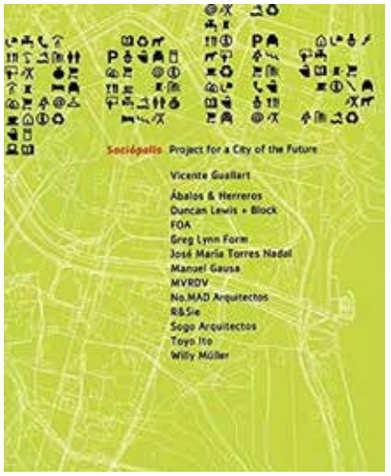
CH

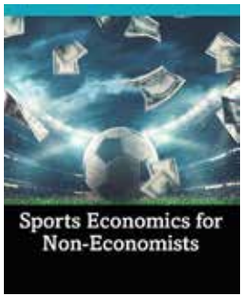

-2030
BC
N


Renewing America's economic promise through
OLDER INDUSTRIAL CITIES
Alan Berube and Cecile Murray
B | Metropolitan Policy Program


Landscapes for Sport
Histories of Physical Exercise, Sport, and Health
Sonja Dümpelmann, editor


cidyr
SO IBEROAMERICANO
STALACIONES
AS Y RECREATIVAS
asofap


Sociópolis Project for a City of the Future
Vicente Guallart
Ábalos & Herreros
Duncan Lewis + Block
FOA
Greg Lynn Form
José María Torres Nadal
Manuel Gausa
MVRDV
No.MAD Arquitectos
R&Sie
Sogo Arquitectos
Toyo Ito
Willy Müller


Sports Economics for
Non-Economists


LAST CHILD
in the WOODS
Saving Our Children from
Nature-Deficit Disorder

CASE STUDY

HOOPFEST, SPOKANE WA

Part of my research included looking at if this process of using public sporting to generate community energy and local business revenue is happening and this is just one example I looked at a lot of different precedents and it kind of made me glaze over the fact that this one is in our backyard and I've been to it.

Highly recommend even just walking through visiting it's very fun there's a lot of little mini events and pop ups. But, in 1990 a group of 5 went around to local businesses making up three blocks of downtown Spokane to get them to sign off on a petition to host a three day basketball tournament they agreed with the hope of getting more business and shut down the traffic of the streets in June.

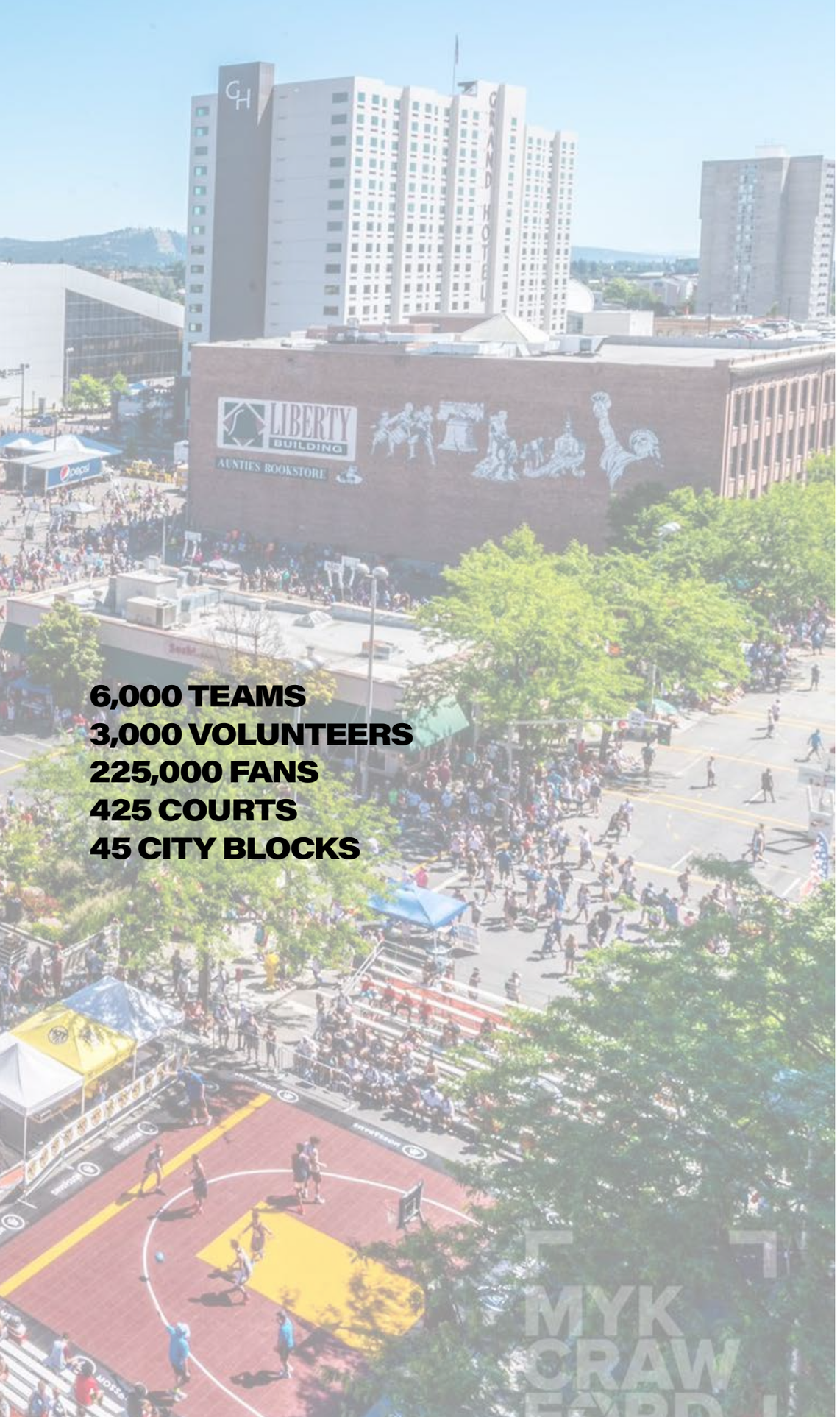
"HOOPFEST WEEKEND BRINGS IN ABOUT A

47-MILLION-DOLLAR IMPACT

TO THE INLAND NORTHWEST EVERY SINGLE JUNE SINCE 1990."

-Spokanehoopfest.net

HTTPS://WWW.FACEBOOK.COM/MYKCRAWFORDPHOTOGRAPHY



Today who hoopfest generates about 47 million to the entire inland northwest not just Spokane and has expanded to 45 city blocks this seasonal influx and reputation paired with Gonzaga's basketball success has helped shape the riverfront development in Spokane and create a new reputation for the city.

ANALYSIS

*SCALE **01**: THE NATIONAL SCALE*

S

Now that I feel grounded in possibility I needed to start analyzing how it could apply all of this research on an American sport context into a digestible methodology

SPORTS

ECONOMICS

$ TOWARDS SCHOOLS
$ GPU

ENVIRONMENT

AIR POLLUTION PPM
WALKSCORE/BIKESCORE
DAYS OF SUN

DEMOGRA

POPULATION
DENSITY

APHICS

INFRASTRUCTURE

FACILITIES
PARKSCORE

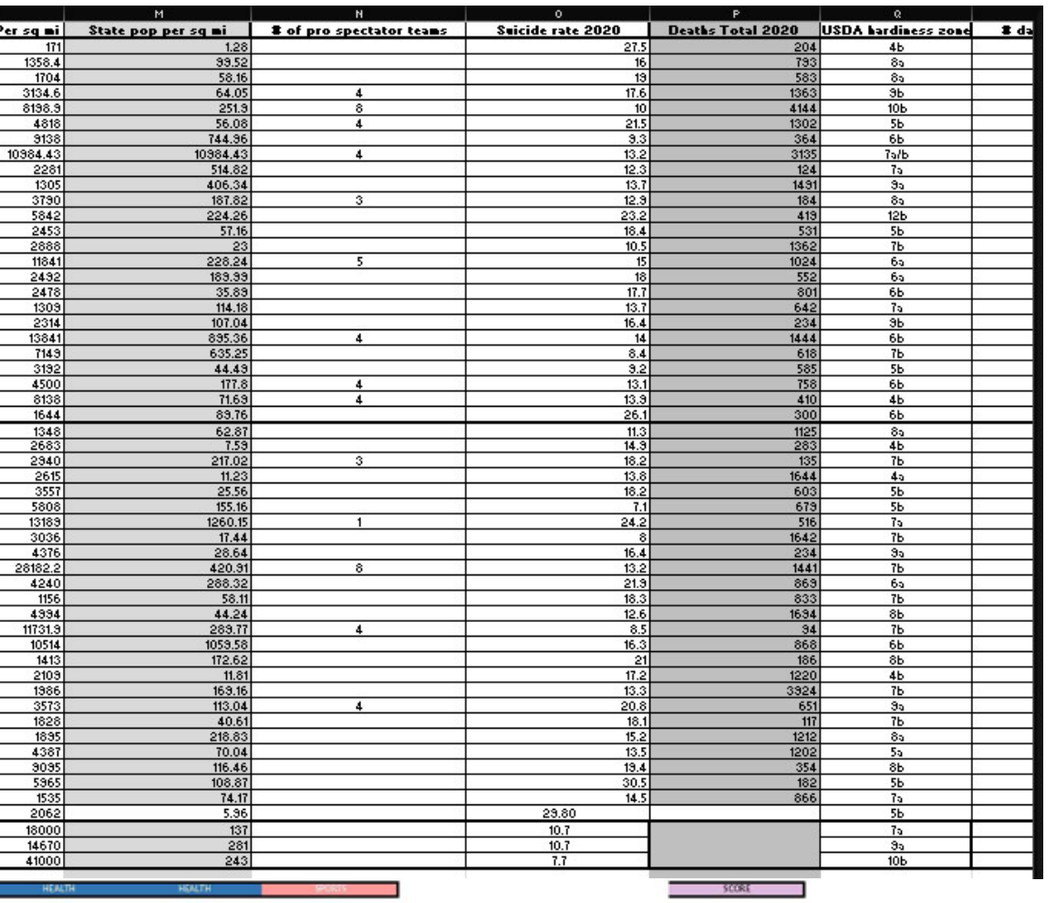
HEALTH

OBESITY
HEART DISEASE

A	B	C	D	E	F	G	H	I	J	K	L
State	City Name	ty % obese/overwei	State Obesity %	art Disease Death Rate/100,0	art dis per 100,000 p	Park Score	# Basketball Hoops in city	Air Quality (particle pollution)	Air Quality (AQ	city Population	City pop.
AK	Anchorage		33.5	139.8	315	75%	19	6.5	21	292530	
AL	Birmingham		39.9	237.5	14739	55%	40	10	52	210328	
AR	Little Rock		38.7	222.5	8621	44%	24	9	5	198,067	
AZ	Phoenix		31.3	144.8	14196	50%	33	12.8	58	1658000	
CA	Los Angeles		27.6	144	66538	63%	34	14.2	30	3,373,000	
CO	Denver		25.1	128.1	8023	89%	63	9.9	44	715,878	
CT	Bridgeport		30.4	138.4	7110	73%	28	8.7	11	145,014	
DC	Washington D.C.		24.7	187.7	no data	98%	93	8.7	36	701,374	
DE	Wilmington		33.9	159.6	2171	97%	28	10.8	23	70,655	
FL	Jacksonville		34	143.1	43287	35%	100	8.5	32	902,488	
GA	Atlanta		33.3	183.7	21116	77%	50	9.5	31	497,642	
HI	Honolulu		25	125	2623	71%	50	3.8	21	347,181	
IA	Des Moines		36.4	172.3	7439	72%	42	7.5	35	215,408	
ID	Boise		31.6	151.3	3131	65%	28	9	35	228,057	
IL	Chicago		34.2	171.4	27460	98%	65	10.6	34	2,633,000	
IN	Indianapolis		36.3	183.3	15163	36%	111	11.5	58	863,387	
KS	Wichita		36	167	6264	53%	16	8	42	390,566	
KY	Louisville		40.3	204.5	11345	39%	33	10.1	35	618,733	
LA	New Orleans		38.6	221.5	12255	80%	41	8.1	41	391,249	
MA	Boston		27.4	126.9	11781	100%	54	6.5	20	683,326	
MD	Baltimore		34.3	168.3	12624	88%	43	8.7	51	602,274	
ME	Portland		31.9	146.2	3035	94%	22	7.6	44	66,706	
MI	Detroit		34.4	205	27127	83%	79	10.9	33	672,351	
MN	Minneapolis		32.4	118.1	8562	98%	44	8.3	25	424,536	
MO	Kansas City		37.3	136.7	15334	70%	32	2	52	491,158	
MS	Jackson		39.1	233.5	8809	32%	14	9.6	42	163,778	
MT	Billings		31.6	162.7	2424	82%	16	2.8	43	109,705	
NC	Charlotte		36	156.2	20373	37%	62	8.9	26	873,570	
ND	Fargo		35.2	147.3	1443	82%	16	6.6	20	123,550	
NE	Omaha		35.9	143.8	3532	82%	14	8.2	39	473,523	
NH	Manchester		30.6	146.5	2814	51%	8	8.5	60	112,441	
NJ	Newark		28.2	166.3	19744	94%	34	8.7	21	281,317	
NM	Albuquerque		34.6	152.7	4219	91%	28	8.4	16	560,447	
NV	Las Vegas		31.3	201.3	7285	75%	100	9.7	10	644,594	
NY	New York City		23.1	183.3	48546	99%	65	8.7	24	8,380,000	
OH	Columbus		37.8	196.3	30547	71%	98	8.8	20	883,078	
OK	Oklahoma City		33.4	244.1	11758	43%	19	10	25	643,821	
OR	Portland		30.4	134	7371	90%	43	3.4	100	650,380	
PA	Philadelphia		33.3	175.7	32936	95%	66	10.8	27	1,582,000	
RI	Providence		30.1	150.5	2319	93%	30	8.5	12	173,472	
SC	Charleston		36.1	170.3	11385	53%	14	6.3	38	137,041	
SD	Sioux Falls		38.4	155.2	1820	63%	30	5.2	67	180,327	
TN	Memphis		35	212	17343	47%	30	8.7	11	650,910	
TX	Houston		36.1	173.3	50281	60%	38	10.6	40	2,313,000	
UT	Salt Lake City		30.9	155.6	4251	84%	64	8.1	28	200,133	
VA	Virginia Beach		34.2	152	15678	68%	85	6.6	1	450,882	
VT	Burlington		29	167.1	1521	94%	22	6.6	29	42,645	
WA	Seattle		28.8	134.6	12084	93%	37	9.1	155	741,251	
WI	Milwaukee		33.9	162.2	12641	80%	78	9	33	592,649	
WV	Charlestone		40.6	137.8	5123	27%	16	7.5	44	48,913	
WY	Cheyenne		32	148.9	1001	85%	8	3.4	16	64,039	
Z- DEN	Copenhagen		33	684	8463	100%	438	3.6	1	1353000	
Z- ENG	London		56	80		79%	256	17.3	19	5586000	
Z- SP	Barcelona		17.43	263	34.87	100%	212	17	45	5624000	

RANKINGS

STATE	CITY NAME	DEMOGRAPHICS	DEMOGRAPHICS	ECONOMICS	ECONOMICS	ENVIRONMENT	ENVIRONMENT	ENVIRONMENT	ENVIRONMENT	HEALTH	HEALTH	HEALTH
		+	+	+	+	+	-	+	+	-	-	-
		CITY POPULATION	CITY DENSITY	GDP (billion US$) 2020	$/student Education	% OF GREEN	AIR QUALITY	AVG ANNUAL TEMP	# OF SUNNY DAYS	OBESITY	DEATH BY HEART DISEASE	SUICIDE
B4	Anchorage	35	54	48	7	80%	6	53	53	25	9	52
AL	Birmingham	39	49	39	41	3%	42	50	27	51	53	30
BA	Little Rock	41	45	42	39	2%	32	33	16	48	49	43
BL	Phoenix	7	29	13	51	16%	51	8	4	36	33	35
"B	Los Angeles	4	13	6	19	13%	52	3	6	6	12	8
";	Denver	15	20	16	36	9%	41	43	8	4	5	47
"D	Bridgeport	45	11	28	5	5%	24	36	53	32	8	7
)"	Washington D.C.	36	9	20	2	24%	26	23	32	2	40	17
)+	Wilmington	50	39	10	15	3%	47	38	35	26	25	13
+5	Jacksonville	30	52	29	42	18%	20	4	15	29	30	21
,8	Atlanta	27	25	12	35	6%	37	12	18	27	37	15
/1	Honolulu	34	17	37	13	18%	4	1	5	3	3	49
18	Des Moines	38	37	38	29	14%	11	44	34	43	34	42
1)	Boise	37	32	43	53	8%	33	24	28	38	39	9
1(	Chicago	5	7	7	14	30%	45	33	44	30	33	28
1*	Indianapolis	33	35	21	43	23%	50	34	45	42	38	37
4B	Wichita	33	36	44	32	5%	14	37	14	38	29	36
4K	Louisville	23	51	35	33	8%	44	19	40	52	45	22
5&	New Orleans	32	38	33	30	23%	15	9	10	47	46	32
8B	Boston	17	5	9	6	17%	21	38	36	5	4	25
9)	Baltimore	24	15	17	8	30%	26	25	29	32	31	4
9+	Portland	53	28	45	16	2%	13	45	33	20	14	6
91	Detroit	18	21	15	27	6%	49	39	46	33	46	16
99	Minneapolis	31	14	14	21	15%	18	52	39	22	2	24
9;	Kansas City	28	46	22	34	30%	3	40	20	44	41	51
9B	Jackson	44	50	47	48	3%	38	33	21	49	50	32
9D	Billings	46	33	53	28	4%	2	53	29	39	27	27
9*	Charlotte	12	31	18	46	6%	31	26	22	39	24	39
93	Fargo	47	34	50	18	7%	7	50	38	35	35	23
9+	Omaha	29	27	35	22	13%	17	46	25	37	31	40
9/	Manchester	48	18	46	9	9%	22	47	41	34	35	1
93	Newark	36	6	5	3	6%	27	20	30	7	28	50
98	Albuquerque	26	30	41	38	29%	19	27	2	34	23	3
9H	Las Vegas	22	23	24	50	18%	40	5	3	37	44	33
9K	New York City	1	2	4	1	21%	28	28	10	30	39	18
/7	Colombes	33	24	23	20	30%	30	35	47	45	42	48
/4	Oklahoma City	21	53	34	49	5%	43	29	9	50	52	41
/A	Portland	20	19	19	25	18%	36	35	50	33	6	14
>8	Philadelphia	8	8	25	11	33%	48	30	7	24	36	5
A1	Providence	43	10	31	10	12%	23	42	37	31	18	31
B*	Charleston	46	48	40	37	2%	10	16	12	40	32	46
B1	Sioux Falls	42	40	49	40	6%	5	54	26	46	22	34
D9	Memphis	19	42	32	44	6%	29	33	17	35	47	19
DJ	Houston	6	26	8	45	12%	46	6	31	41	35	45
FD	Salt Lake City	40	44	26	54	2%	16	32	52	35	23	38
H8	Virginia Beach	30	43	27	24	16%	8	14	24	31	20	29
HD	Burlington	54	22	51	4	5%	9	42	54	9	30	20
I8	Seattle	14	12	11	17	19%	35	17	48	8	7	44
I1	Milwaukee	25	16	30	23	30%	34	48	43	28	26	54
IH	Charleston	53	47	52	26	12%	12	23	13	53	43	26
IK	Cheyenne	52	41	54	12	50%	3	49	11	21	17	53
Z- DEN	Copenhagen	9	3	2	31	0%	39	22	49	23	54	10



Per sq mi	M State pop per sq mi	N # of pro spectator teams	O Suicide rate 2020	P Deaths Total 2020	Q USDA hardiness zone	# da
171	1.28		27.5	204	4b	
1358.4	39.52		16	733	8a	
1704	58.16		19	583	8a	
3134.6	64.05	4	17.6	1363	3b	
8138.9	251.9	8	10	4144	10b	
4818	56.08	4	21.5	1302	5b	
9138	744.36		9.3	364	6b	
10384.43	10384.43	4	13.2	3135	7a/b	
2281	514.82		12.3	124	7a	
1305	406.34		13.7	1431	3a	
3790	187.82	3	12.9	184	8a	
5842	224.26		23.2	419	12b	
2453	57.16		18.4	531	5b	
2888	23		10.5	1362	7b	
11841	228.24	5	15	1024	6a	
2492	183.99		18	552	6a	
2478	35.89		17.7	801	6b	
1309	114.18		13.7	642	7a	
2314	107.04		16.4	234	3b	
13841	895.36	4	14	1444	6b	
7149	635.25		8.4	618	7b	
3192	44.49		9.2	585	5b	
4500	177.8	4	13.1	758	6b	
8138	71.69	4	13.9	410	4b	
1644	89.76		26.1	300	6b	
1348	62.87		11.3	1125	8a	
2683	7.59		14.9	283	4b	
2940	217.02	3	18.2	135	7b	
2615	11.23		13.8	1644	4a	
3557	25.56		18.2	603	5b	
5808	155.16		7.1	679	5b	
13189	1260.15	1	24.2	516	7a	
3036	17.44		8	1642	7b	
4376	28.64		16.4	234	3a	
28182.2	420.31	8	13.2	1441	7b	
4240	288.32		21.9	869	6a	
1156	58.11		18.3	833	7b	
4394	44.24		12.6	1634	8b	
11731.8	283.77	4	8.5	94	7b	
10514	1053.58		16.3	868	6b	
1413	172.62		21	186	8b	
2109	11.81		17.2	1220	4b	
1386	163.16		13.3	3924	7b	
3573	113.04	4	20.8	651	3a	
1828	40.61		18.1	117	7b	
1895	218.83		15.2	1212	8a	
4387	70.04		13.5	1202	5a	
3095	116.46		13.4	354	8b	
5965	108.87		30.5	182	5b	
1535	74.17		14.5	866	7a	
2062	5.36		23.80		5b	
18000	137		10.7		7a	
14670	281		10.7		3a	
41000	243		7.7		10b	

HEALTH + WALKSCORE INDEX	HEALTH + BIKESCORE INDEX	SPORTS TOTAL PRO TEAMS
53	26	
47	50	
25	46	
35	22	4
34	20	8
23	9	4
36	30	
7	11	4
32	25	
54	43	
29	39	3
37	28	
31	45	
38	17	
6	8	5
50	38	
44	36	
45	37	
24	16	
5	12	4
18	23	
19	14	
26	24	4
13	4	4
41	47	
53	48	
42	51	
52	49	3
32	31	
28	40	
27	52	
9	27	1
33	19	
34	34	
3	13	8
16	33	
46	44	
15	5	
30	15	4
8	18	
17	29	
39	35	
43	42	
30	32	4
22	7	
48	41	
21	6	
11	10	
20	21	
49	53	
40	54	
1	1	

SCORE TOTAL+-	STATE	CITY NAME
416.83	[illegible]	Anchorage
476.02	AL	Birmingham
437.04	[illegible]	Little Rock
288.33	[illegible]	Phoenix
173.26	[illegible]	Los Angeles
269.37	[illegible]	Denver
275.30	[illegible]	Bridgeport
206.68	[illegible]	Washington D.C.
335.02	[illegible]	Wilmington
329.36	[illegible]	Jacksonville
316.12	[illegible]	Atlanta
233.36	[illegible]	Honolulu
426.28	[illegible]	Des Moines
353.17	[illegible]	Boise
265.20	[illegible]	Chicago
446.42	[illegible]	Indianapolis
393.30	[illegible]	Wichita
446.37	[illegible]	Louisville
343.43	[illegible]	New Orleans
187.34	[illegible]	Boston
246.19	[illegible]	Baltimore
304.05	[illegible]	Portland
364.32	[illegible]	Detroit
258.30	[illegible]	Minneapolis
415.19	[illegible]	Kansas City
473.06	[illegible]	Jackson
413.08	[illegible]	Billings
392.13	[illegible]	Charlotte
382.13	[illegible]	Fargo
358.26	[illegible]	Omaha
340.18	[illegible]	Manchester
248.12	[illegible]	Newark
293.58	[illegible]	Albequerque
329.36	[illegible]	Las Vegas
365.42	[illegible]	New York City
394.20	[illegible]	Columbus
471.30	[illegible]	Oklahoma City
237.36	[illegible]	Portland
231.26	[illegible]	Philadelphia
283.24	[illegible]	Providence
393.04	[illegible]	Charleston
432.32	[illegible]	Sioux Falls
400.11	[illegible]	Memphis
355.24	[illegible]	Houston
368.04	[illegible]	Salt Lake City
339.33	[illegible]	Virginia Beach
324.30	[illegible]	Burlington
234.25	[illegible]	Seattle
368.39	[illegible]	Milwaukee
448.24	[illegible]	Charleston
408.00	[illegible]	Cheyenne
#VALUE!	[illegible]	Copenhagen

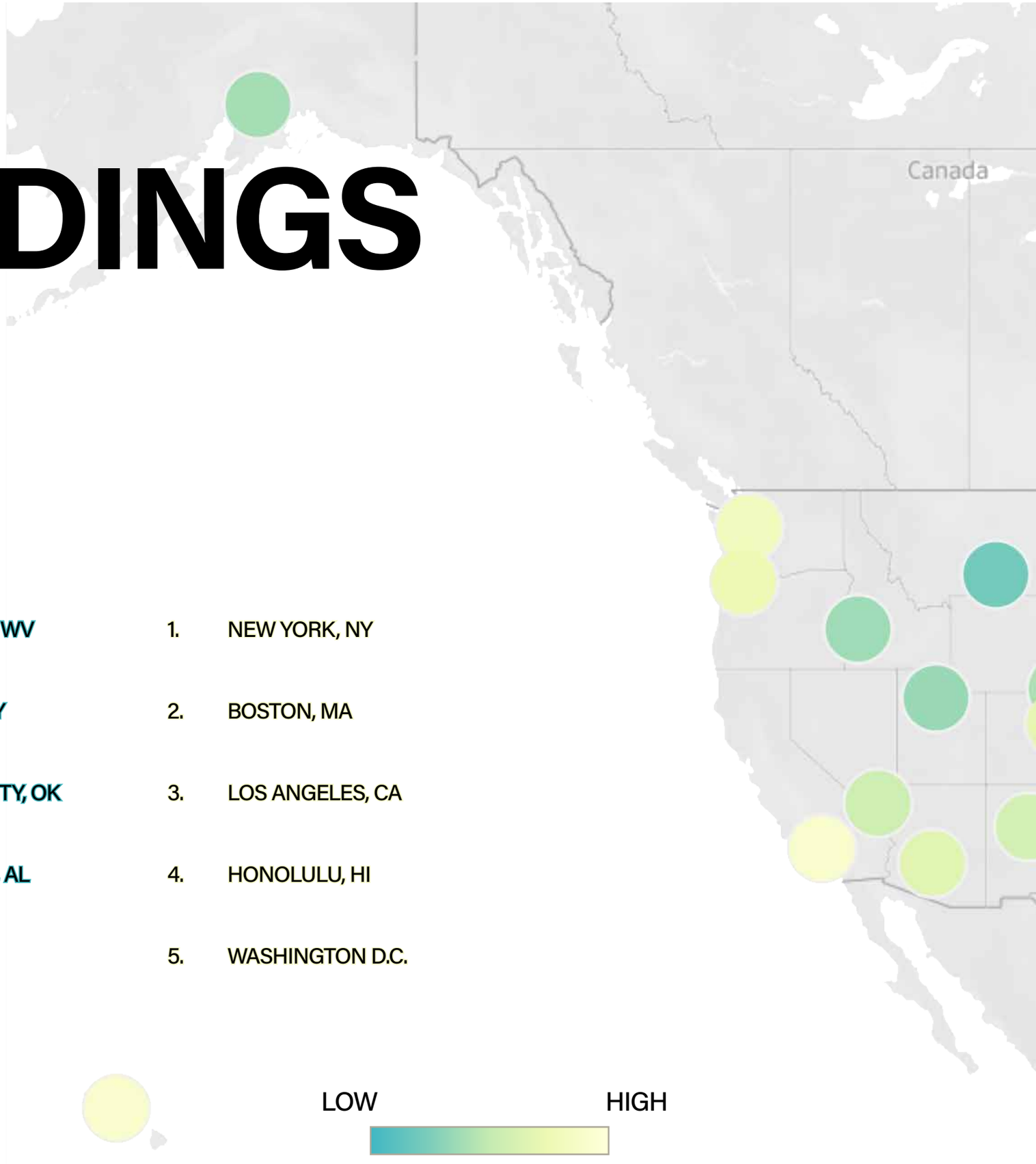
I have been advised by multiple people to let you know up front that I don't expect you to understand any of this because that was kind of my job but my process began for example by trying to look at every major city across the United States and how some factors included census data like obesity how many people die from heart disease every year air pollution walkability park score, etc.

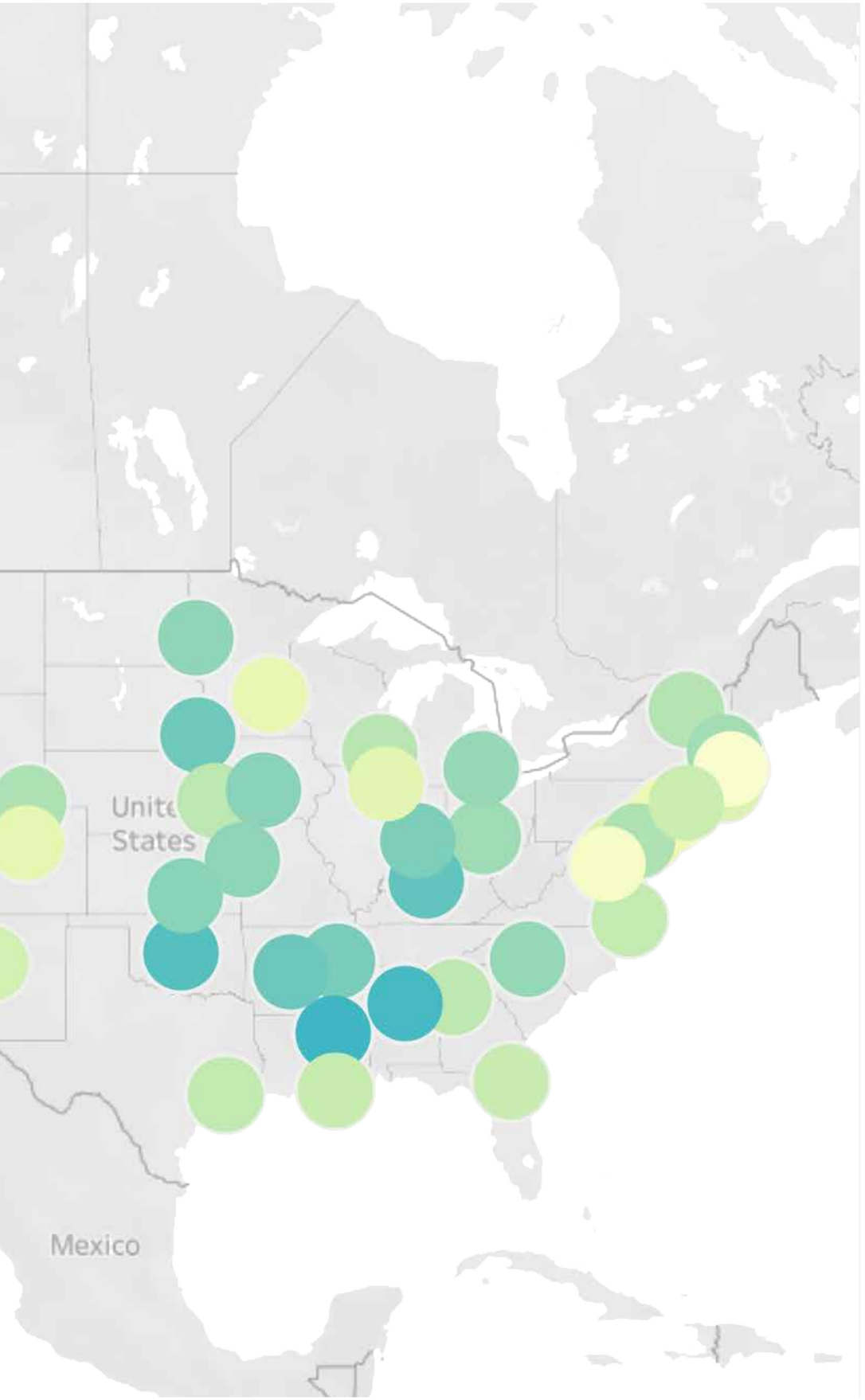
This data sifting took a few months and a lot of conceptual thinking as well visualization attempts in tableau and excel I wanted the data to be relevant so I what I did, in the shortest summary ever of a couple months of my life was evenly rank them compared to one another to start seeing how those categories that are adding up compare Los Angeles to West Virginia for example.

Some factors included census data, NOAA and EPA.

FINDINGS

46.	CHARLESTON, WV	1.	NEW YORK, NY
47.	LOUISVILLE, KY	2.	BOSTON, MA
48.	OKLAHOMA CITY, OK	3.	LOS ANGELES, CA
49.	BIRMINGHAM, AL	4.	HONOLULU, HI
50.	JACKSON, MS	5.	WASHINGTON D.C.



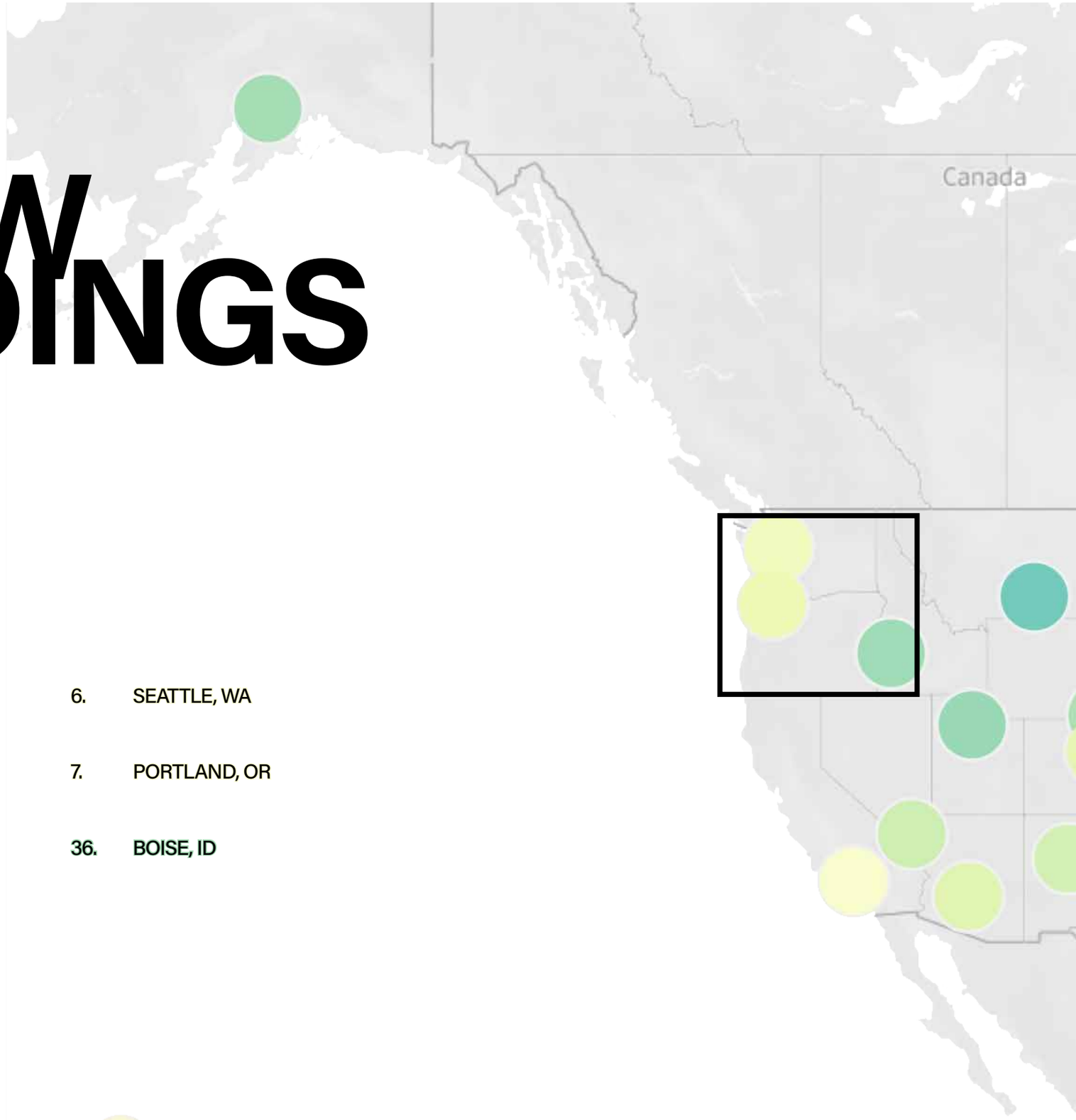


As mentioned previously in my project the analysis uses these categories to begin organizing what areas could impact healthy living at the national level, so heres what I found:

The south deeply struggles with issue of health pertaining to all of these categories, not saying they don't hold impactful sport culture or communities, but there is significant work to be done in many of their sectors, most notably obesity and heart disease.

Some of the best scores are so great, if you can afford to live there!!

PNW FINDINGS

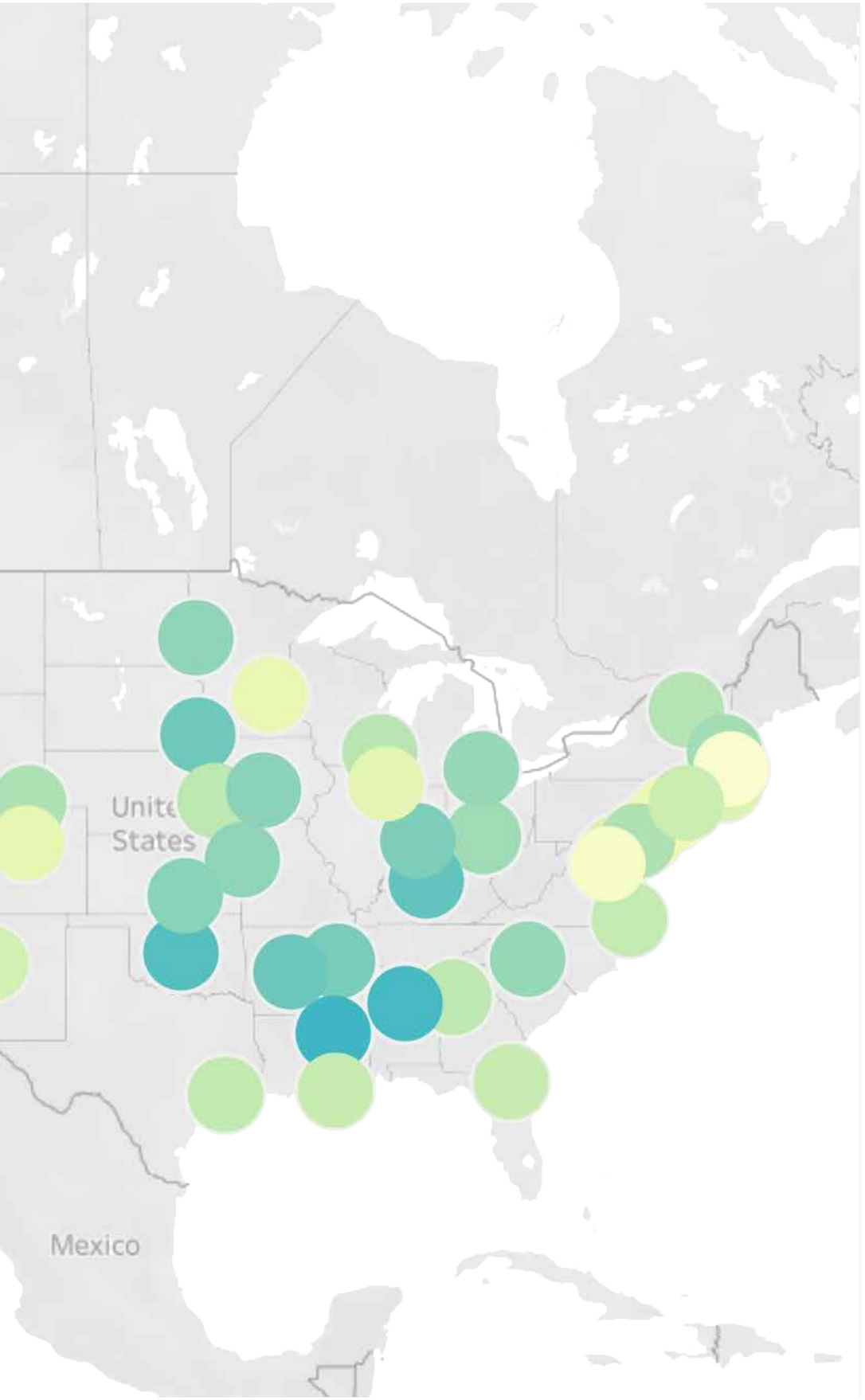


6. SEATTLE, WA

7. PORTLAND, OR

36. BOISE, ID

LOW HIGH



So what does this mean? How does this matter? Well, if I'm building a methodology that can be applied anywhere, I have to take my data and start applying it to my skills. This degree has provided me with important environmental analysis and design skills in our climate, so I want to look into the best of the Pacific Northwest to make this process a little easier since I am driving this train. Seattle and Portland ranked one after the other, but for a lot of reasons including density, population, and the newer surge of people moving to Boise it fell a bit shorter.

TAKEAWAYS

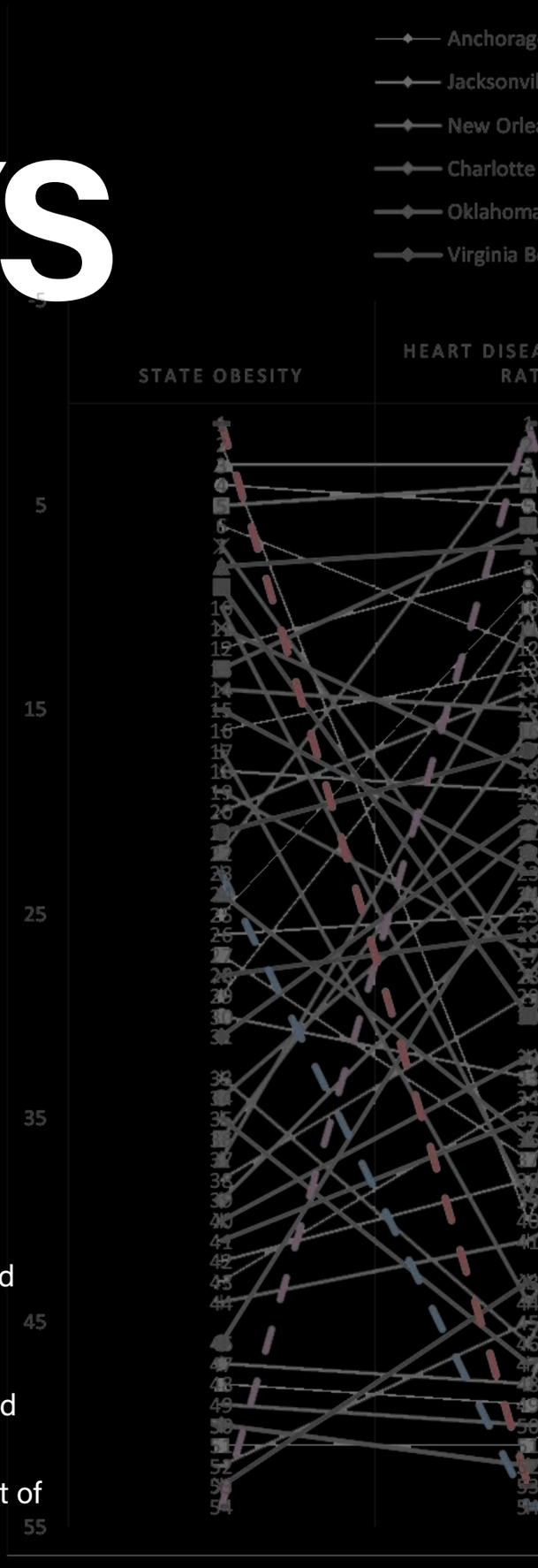
- **Majority of 'successful' cities in the ranking were observed on the coastlines of the U.S.**
- **American city density could really improve**
- **Our city models are challenged an incomparable to a lot of European counter parts due to population sizes**
- **I hate excel but love Tableau**

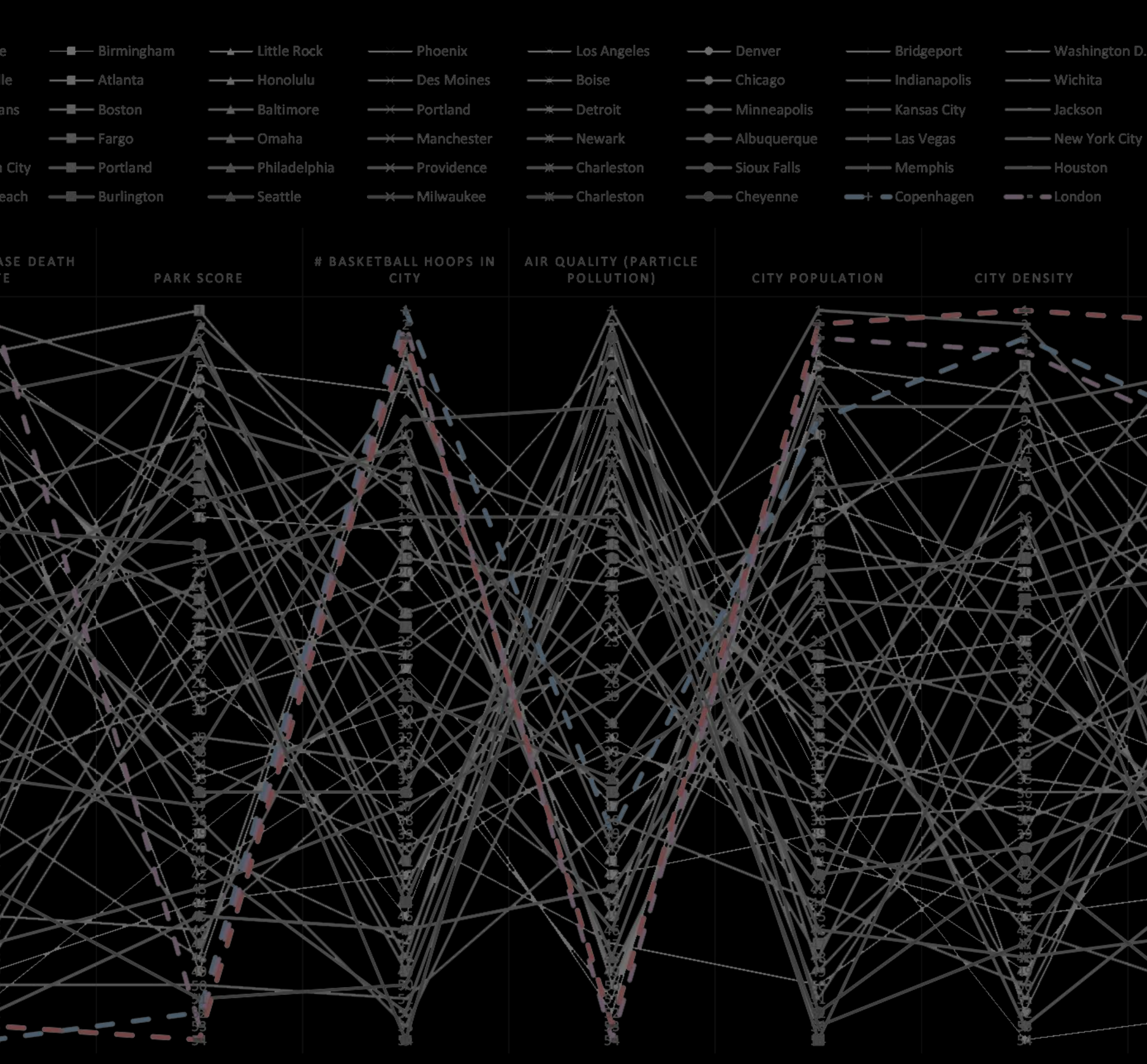
Softwares used:

Excel, Tableau, QGIS

Summary Steps:

1. Research and understand how geography pertains to infrastructure and health in the U.S.
2. Determine what data and factors contribute to health and sport activity
3. Rank the data points correlating to each city (with the largest population) in each state relative to one another, and see what kind of economic culture that city carries
4. Consider how this data could influence larger investment of public infrastructure and resources

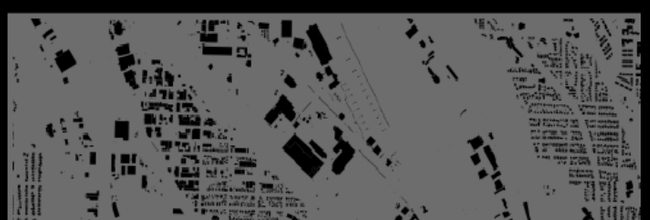



Birmingham
Little Rock
Phoenix
Los Angeles
Denver
Bridgeport
Washington D.
Atlanta
Honolulu
Des Moines
Boise
Chicago
Indianapolis
Wichita
Boston
Baltimore
Portland
Detroit
Minneapolis
Kansas City
Jackson
Fargo
Omaha
Manchester
Newark
Albuquerque
Las Vegas
New York City
Portland
Philadelphia
Providence
Charleston
Sioux Falls
Memphis
Houston
Burlington
Seattle
Milwaukee
Charleston
Cheyenne
Copenhagen
London
PARK SCORE
BASKETBALL HOOPS IN CITY
AIR QUALITY (PARTICLE POLLUTION)
CITY POPULATION
CITY DENSITY

ANALYSIS

*SCALE **02**: THE CITY SCALE*

S



SEATTLE ANAL

SPO

ECONOMICS

MEDIAN HOME COST
PRIVATE SPORTS

ENVIRONMENT

PARKS
WETLANDS
RIPARIAN ZONES
HAZARDS
INDUSTRIAL AREAS
VEGETATION

DEMOGRA

POPULATION
DENSITY
RACE
EDUCATION LE
PRIMARY LANG
AGE

LYSIS

ORTS

APHICS

EVEL
GUAGE

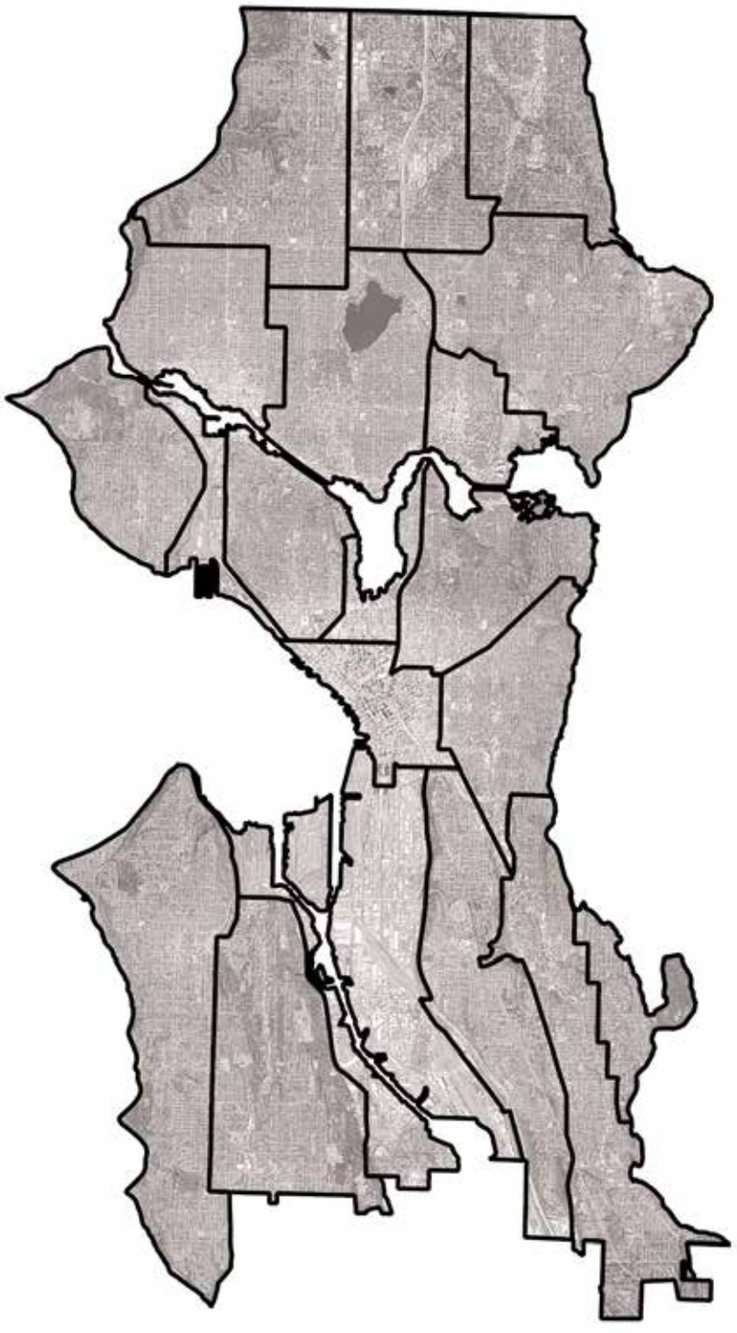
INFRASTRUCTURE

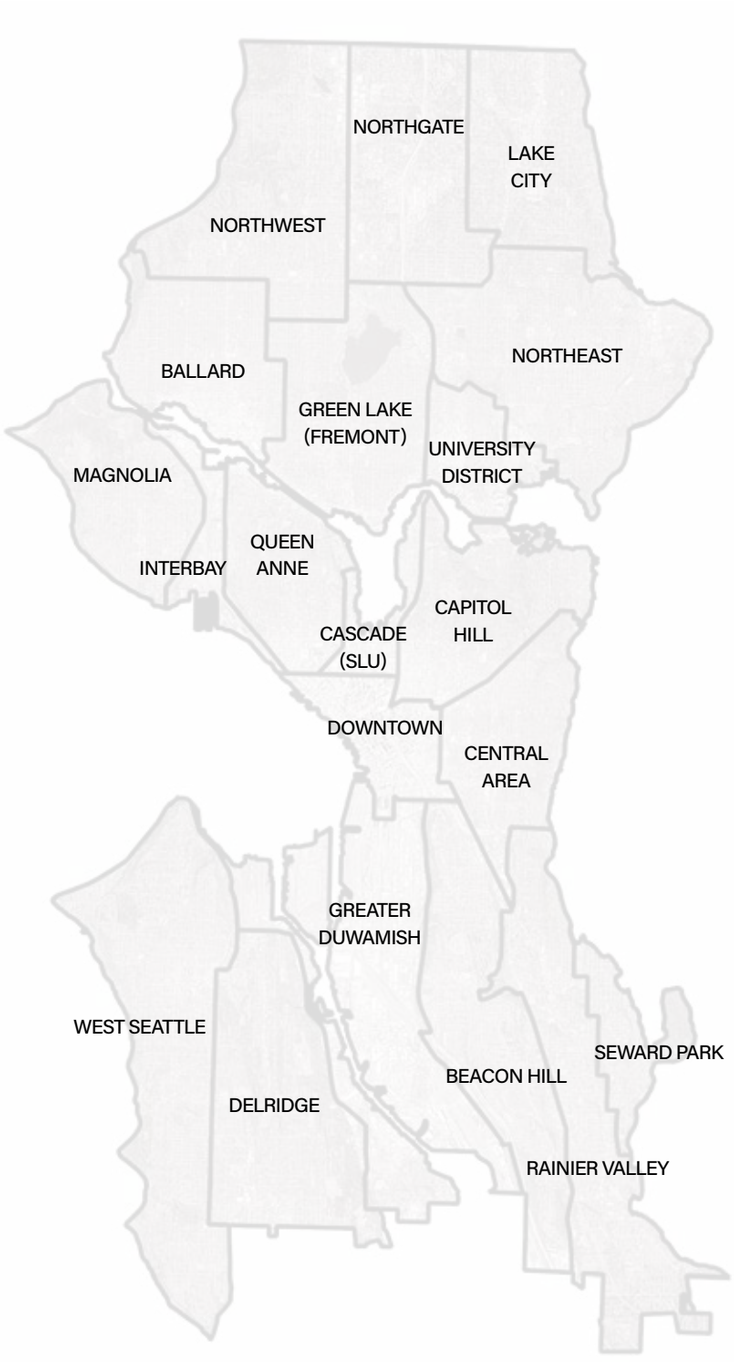
FACILITIES
PUBLIC SCHOOLS
PRIVATE SCHOOLS
STREETS
TRAILS
ZONING

HEALTH

OBESITY
HEART DISEASE

SEATTLE ANALYSIS





I set up my analysis the same way following my project structure, this data was now going to be a little more dissectible and was a bit more familiar to me due to the Barcelona program. These 22 indicators within my categories were some of my target data sets I sought out.

Overall this added up to about 70 shapefiles, Seattle's opendata is luckily pretty good.

So if you haven't done any sort of process like this or used GIS you kind of need to find a basket. If I am looking at 70 shapefiles, and each shapefiles has hundreds of thousands of data, like apples and oranges, I needed to find a way to put those apples and those oranges into specific baskets. Massive organizer is I apparently.

Districts are helpful, within a city they carry different culture and landscape types in this larger urban system. Seattle has 20 identified districts, which some names are a bit different to locals.

SEATTLE ANALYSIS

Environmental

Infrastructure

Demographics

Hazards &
Zoning

Parks

Riparian

Wildlife

Vegetative Cover

sit Stops

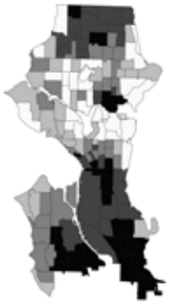
Public Parking

Bike Lanes

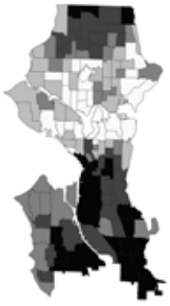
Streets

Race

Economic Standing



Health Equity



Design Equity

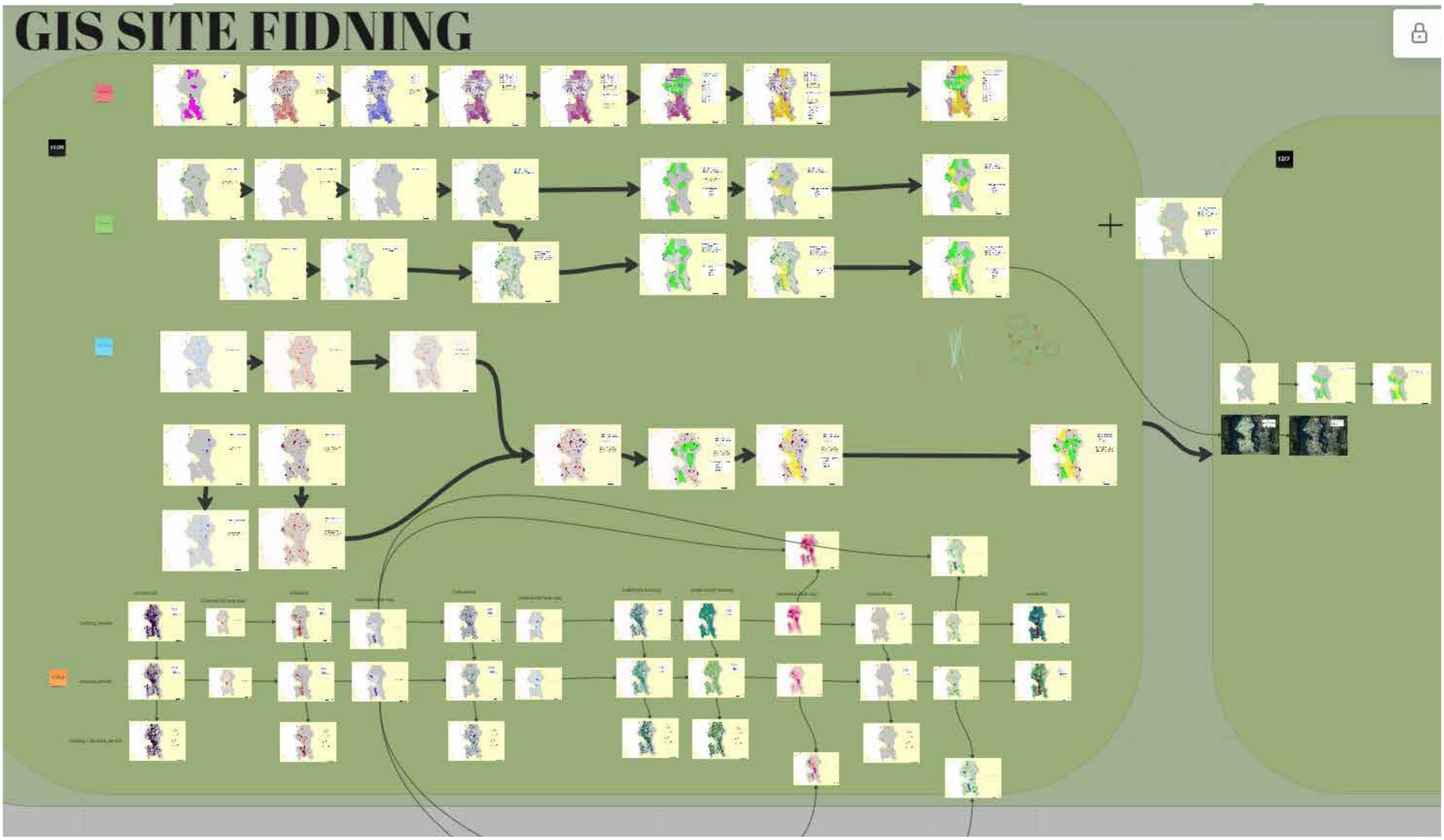
sidential

Industrial

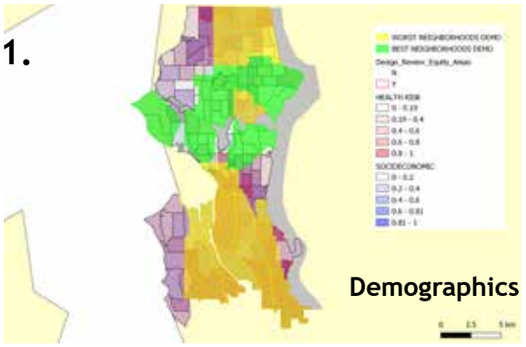
Flood Risk

Earthquake Risk

PROCESS WORK



1.



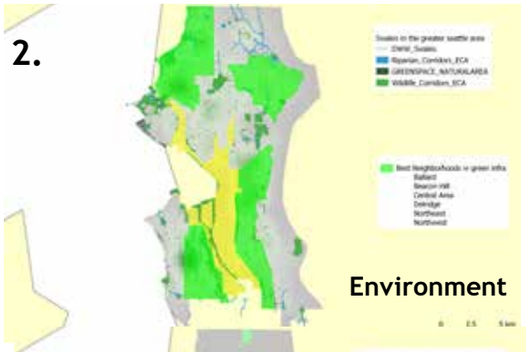
+1 QUEEN ANNE
+1 CAP HILL
+1 NORTH CENTRAL
+1 MAGNOLIA
+1 NORTHEAST

0 NORTHWEST
0 BALLARD
0 CASCADE
0 INTERBAY
0 CENTRAL AREA
0 WEST SEATTLE
0 SEWARD PARK

-1 GREATER DUWAMISH
-1 DELRIDGE
-1 RAINIER VALLEY
-1 BEACON HILL
-1 NORTHGATE
-1 U DISTRICT
-1 LAKE CITY
-1 DOWNTOWN

This is another example of some layers I don't expect you do understand, but to display my process.

2.



+2 NORTHEAST

+1 QUEEN ANNE
+1 CAP HILL
+1 NORTH CENTRAL
+1 MAGNOLIA
+1 NORTHWEST
+1 BALLARD
+1 CENTRAL AREA

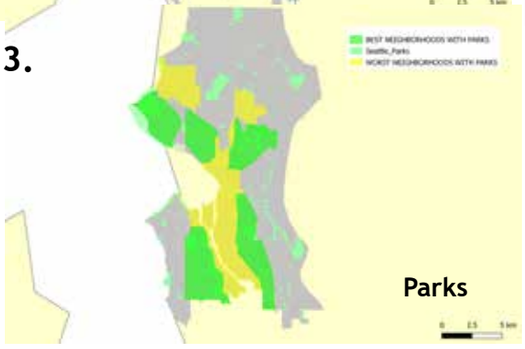
0 WEST SEATTLE
0 SEWARD PARK
0 BEACON HILL
0 DELRIDGE

-1 RAINIER VALLEY
-1 NORTHGATE
-1 U DISTRICT
-1 LAKE CITY
-1 CASCADE
-1 INTERBAY

-2 GREATER DUWAMISH
-2 DOWNTOWN

So, by hand I determined what some of my most influential data is to the user, and being able to sport. Facilities and there American tie to recreation play a huge role, the parks we are given to do so, and how much leisure time we have to take care of ourselves aka socioeconomic standing.

3.



+2 NORTHEAST
+2 QUEEN ANNE
+2 CAP HILL
+2 MAGNOLIA

+1 NORTH CENTRAL
+1 NORTHWEST
+1 CENTRAL AREA
+1 BEACON HILL
+1 DELRIDGE

0 BALLARD
0 WEST SEATTLE
0 SEWARD PARK

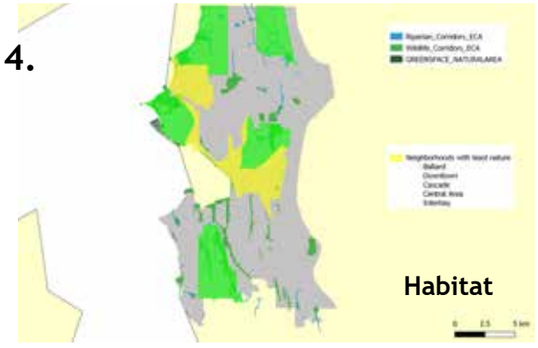
-1 RAINIER VALLEY
-1 NORTHGATE
-1 LAKE CITY
-1 INTERBAY

-2 U DISTRICT
-2 CASCADE

-3 GREATER DUWAMISH
-3 DOWNTOWN

At this level I wanted to apply a touch of personal knowledge just from life and growing up playing in facilities; you can't trust a local school to want to support your sport play if it isn't tied to their school, renting space is super high, and they cater a lot of kids so my filtering and as a landscape designer I really wanted to select heavily on parks and open space and how they can be protected and saved for communities that don't have them. One last consideration was: I want sport to be an escape for people, and for a lot of kids, that 70% that quit playing, school may not be the escape for them.

4.



+3 MAGNOLIA

+2 NORTHEAST
+2 QUEEN ANNE
+2 CAP HILL
+2 NORTHWEST
+2 DELRIDGE

+1 NORTH CENTRAL
+1 BEACON HILL

0 CENTRAL AREA
0 WEST SEATTLE
0 SEWARD PARK
0 LAKE CITY

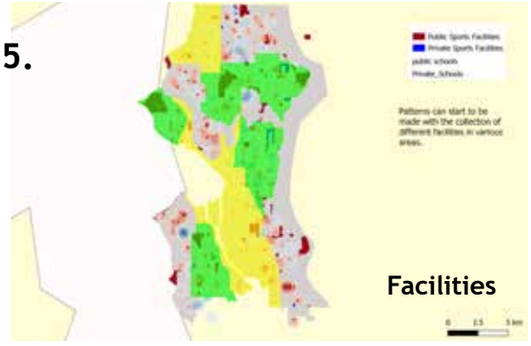
-1 BALLARD
-1 RAINIER VALLEY
-1 NORTHGATE

-2 INTERBAY
-2 U DISTRICT

-3 CASCADE
-3 GREATER DUWAMISH

-4 DOWNTOWN

5.



+4 MAGNOLIA

+3 CAP HILL
+3 NORTHEAST

+2 QUEEN ANNE
+2 DELRIDGE
+2 NORTH CENTRAL

+1 NORTHWEST
+1 BEACON HILL
+1 CENTRAL AREA

0 WEST SEATTLE
0 SEWARD PARK
0 LAKE CITY

-1 BALLARD
-1 RAINIER VALLEY
-1 NORTHGATE

-2 U DISTRICT

-3 INTERBAY

-4 CASCADE
-4 GREATER DUWAMISH

-5 DOWNTOWN

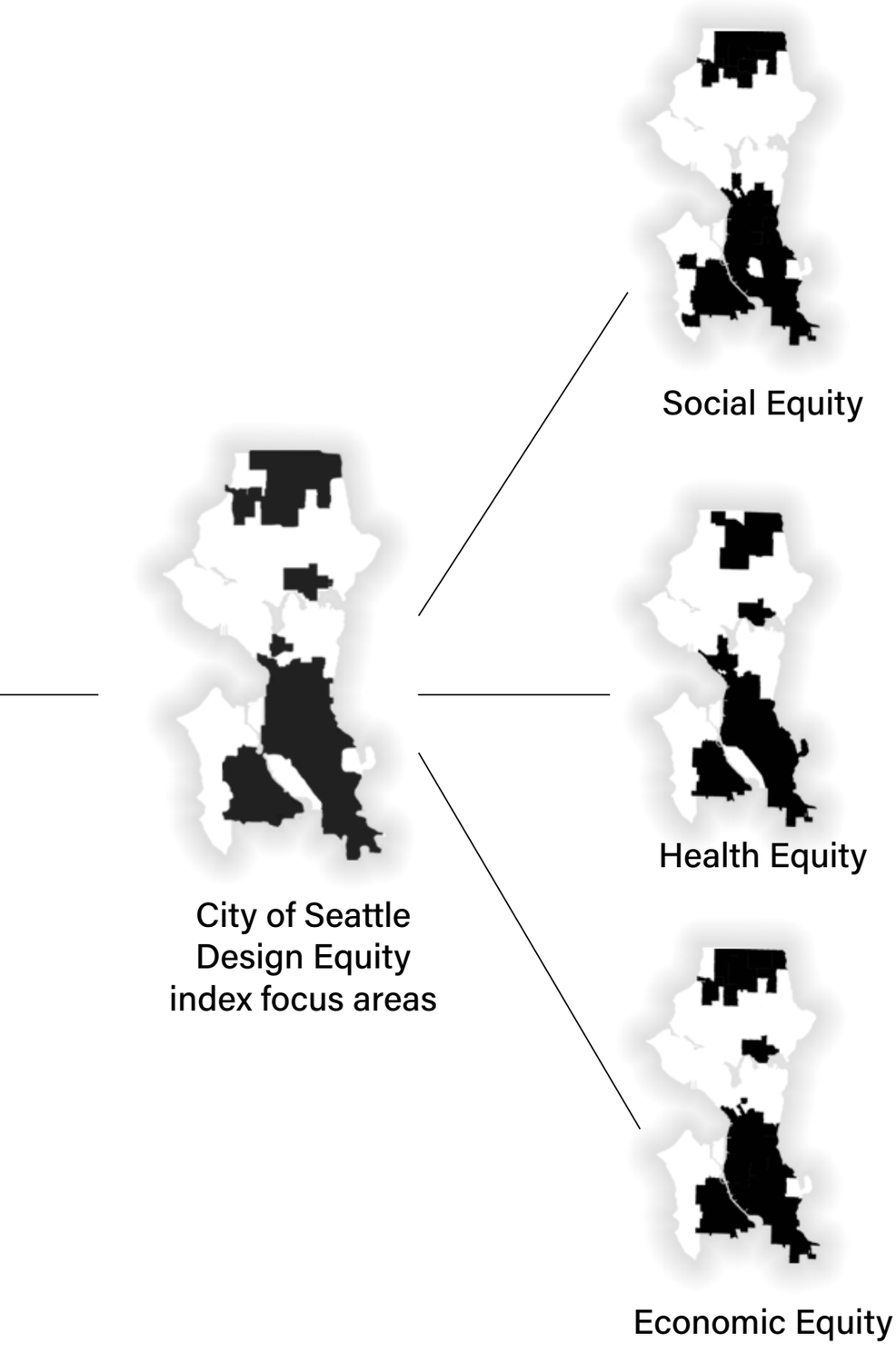
PROCESS WORK

Wildlife Corridors

Vegetative NDVI

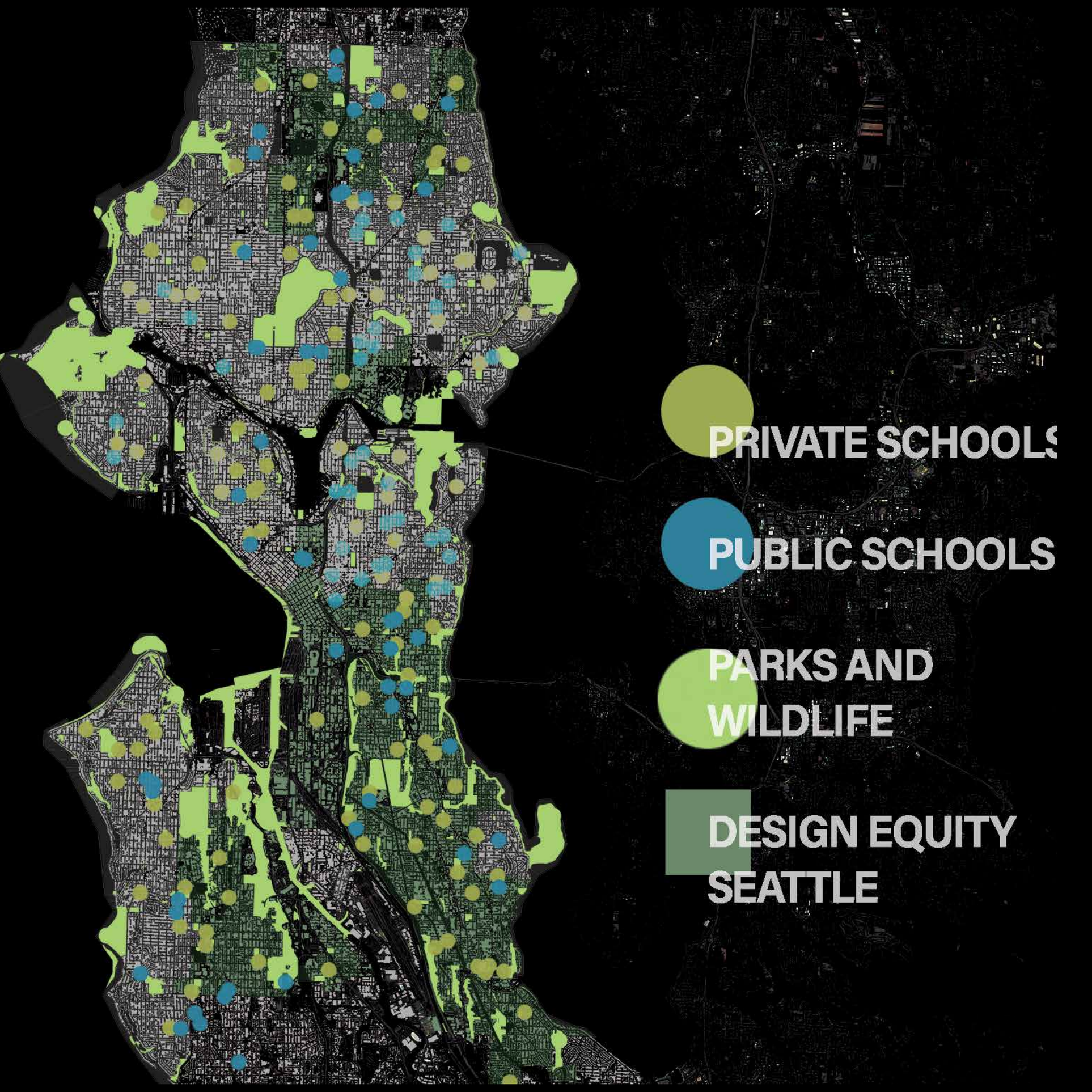
Parks

Green Space
Overlay


Social Equity
Health Equity
Economic Equity
City of Seattle
Design Equity
index focus areas

OVERLAY PROCESS

City of Seattle Design Equity Data by the Department of Neighborhoods


PRIVATE SCHOOLS
PUBLIC SCHOOLS
PARKS AND WILDLIFE
DESIGN EQUITY SEATTLE

+4

MAGNOLIA

QUICK FACTS:

Shape area: ~ 3.6 mi²

Avg Home Selling Price: 1,180,000 USD (+7.8%)

Known Parks: Discovery Park, formerly U.S. Army's Fort Lawton, K
Memorial Park, Magnolia Tidelands Park, etc.

Schools: 3 public, 2 private

+3

CAPITOL HILL

QUICK FACTS:

Shape area: ~ 3.8 mi²

Avg Home Selling Price: 762,500 USD (+3.7%)

Known Parks: Washington Park and Arboretum, Volunteer Park, M
Park, Cal Anderson Park, etc.

Schools: 5 public, 8 private

+3

NORTHEAST

QUICK FACTS:

Shape area: ~ 6.8 mi²

Avg Home Selling Price: 1,030,000 USD (+8.4%)

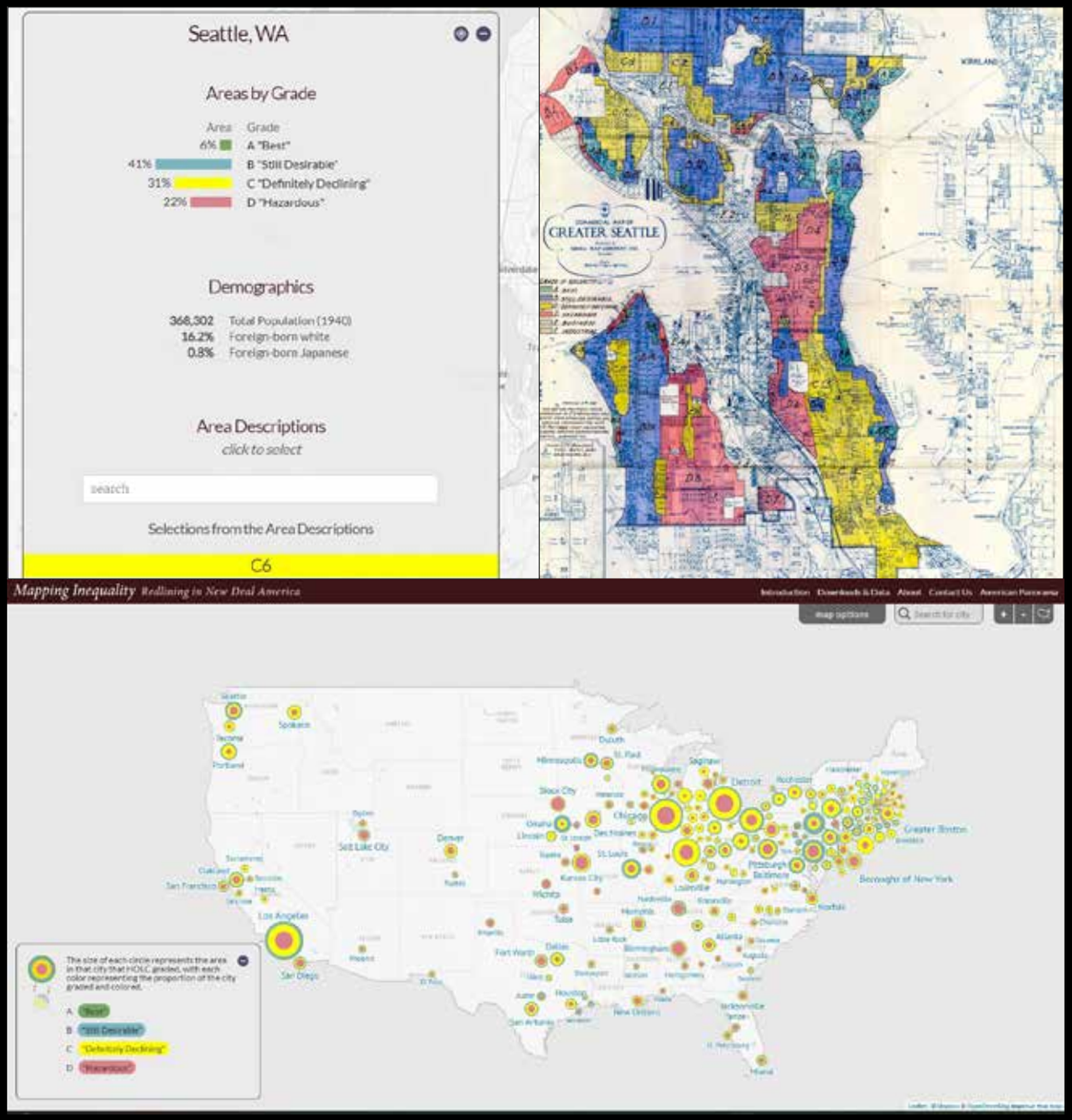
Known Parks: Magnuson Park, Burke Gilman Trail, etc.

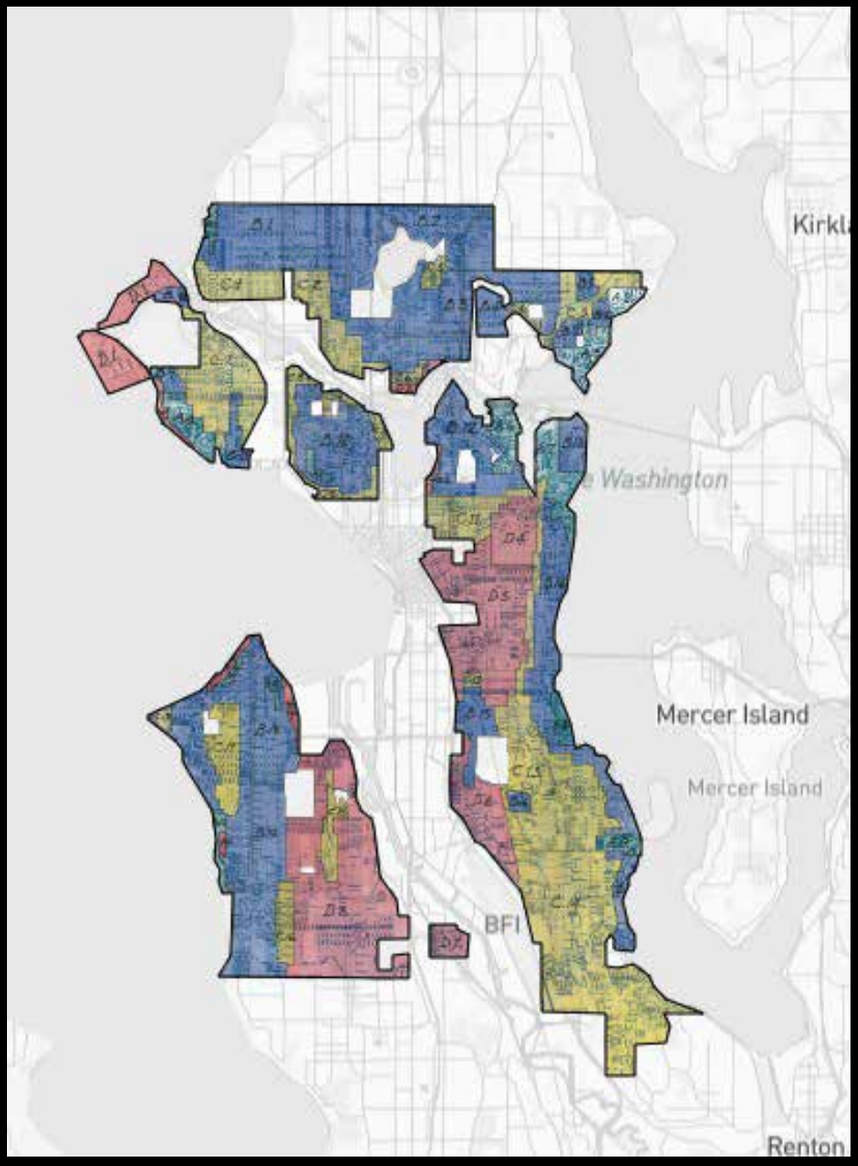
Schools: 9 public, 7 private

HIGHEST SCORING DISTRICTS

These neighborhoods were filtered and chosen for their quantity and distribution of parks, schools, public/private exercise facilities, environmental character for wildlife habitat/green corridors, protected riparian areas, and wetlands. An existing study of areas of interest for the city of Seattle analyzing socioeconomic status and health risk, brought on by the COVID-19 pandemic was also applied based on inputs including but not limited to average income and home price, level of education, and primary language in the home. This study designated particular areas of neighborhoods that could improve their shared public space or infrastructure in the future.

MAPPING INEQUALITY





From my knowledge living there, and just how much I have learned about the impacts of redlining I wanted to see how much of these laws are still visible, GIS lets us do that. Mapping inequality is a wonderful resource by the university of Richmond highly recommend, and from what I noticed these areas pertain a lot to the historical delineation of best or still desirable areas, Magnolia is a special little case but I don't have time to talk about it.

My impact areas although are pretty shared with the space of historical industry.

Something I noticed pretty quickly was the historically redzones weren't all popping up in my overlay today, but the areas of industry as a whole were. So now to keep moving forward I had to make a decision one which area to implement regenerative sport urbanism.

-5 DOWNTOWN

QUICK FACTS:

Shape area: ~ 2.0 mi²

Avg Home Selling Price: 529,500 USD (-20.4%)

Known Parks: Jim Ellis Freeway Park, Pier 62 and 63, Olympic Scul
Park, Westlake Park etc.

Schools: 0 public, 5 private

-4 GREATER DUWAM

QUICK FACTS:

Shape area: ~ 7.6 mi²

Avg Home Selling Price: 585,000 USD (+14.7%)

Known Parks: Oxbow Park, Georgetown Playfield

Schools: 0 public, 1 private, 7 trade

-4 CASCADE

QUICK FACTS:

Shape area: ~ 1.0 mi²

Avg Home Selling Price: 720,000 USD (-17.2%)

Known Parks: Lake Union Park, Denny Park, Cascade Playground,
Pettus Park, Fairview Park etc.

Schools: 9 public, 7 private

lpture

ISH

Terry

LOWEST SCORING DISTRICTS

These neighborhoods were filtered and chosen for their quantity and distribution of parks, schools, public/private exercise facilities, environmental character for wildlife habitat/green corridors, protected riparian areas, and wetlands. An existing study of areas of interest for the city of Seattle analyzing socioeconomic status and health risk, brought on by the COVID-19 pandemic was also applied based on inputs including but not limited to average income and home price, level of education, and primary language in the home. This study designated particular areas of neighborhoods that could improve their shared public space or infrastructure in the future.

GREATER DUWAMISH OPPORTUNITY

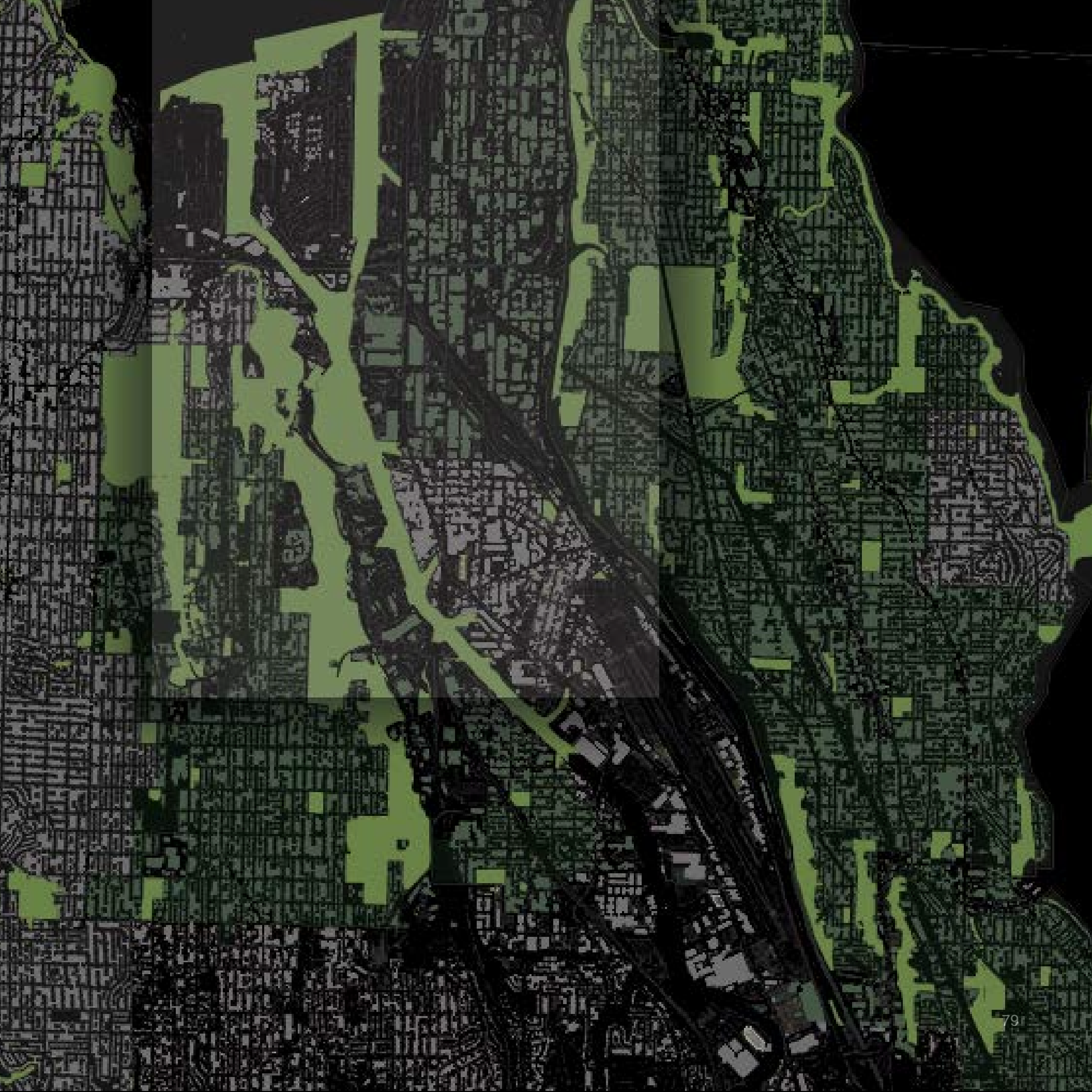
In June 2020, King 5 news reported that downtown Seattle had lost 2,685 businesses, for a lot of reasons. The city is working on assisting the public that exists downtown, and It's a mix of a larger challenge that was outside of my scope.

Cascade aka "SLU of Southlake Union", is a newly revitalized zone with incredibly expensive and luxury hotels, a Google Office, some Amazon offices, and nice new park and lots of stormwater infrastructure, it looks great. This urban regeneration is expensive residential, hospitality, and big corps focused which is not what I am looking to do with my project.

The Greater Duwamish has had my heart for a few years, which I didn't really realize until I continued to explore this project, it was a tiny neighborhood you could barely see from the freeway that had the only indoor beach volleyball facility in Western Washington. A warehouse filled with sand, that couldn't stay alive during COVID, a small example of a big issue in participatory sports today.

The topography is a valley, of a historical wetland with one residential area. This district has: freight storage and warehouses for manufacturing, Beer and Art walks, the Duwamish longhouse, event hosting, a P-Patch garden, and a superfund site, Boeing air field. The complexity is so exciting and fun.

Maps lie too.



5,062 GROSS ACR

1 SUPERFUND SIT

1,376 POPULATION

85% INDUSTRIAL

4% COMMERCIAL

2% PARKING

7% VACANT

<1% RESIDENTIAL

59% SIDEWALK A

EAGE
E
N
CCESS

5,062 GROSS ACREAGE
1 SUPERFUND SITE
1,376 POPULATION
85% INDUSTRIAL
4% COMMERCIAL
2% PARKING
7% VACANT
<1% RESIDENTIAL
59% SIDEWALK ACCESS

TAKEAWAYS

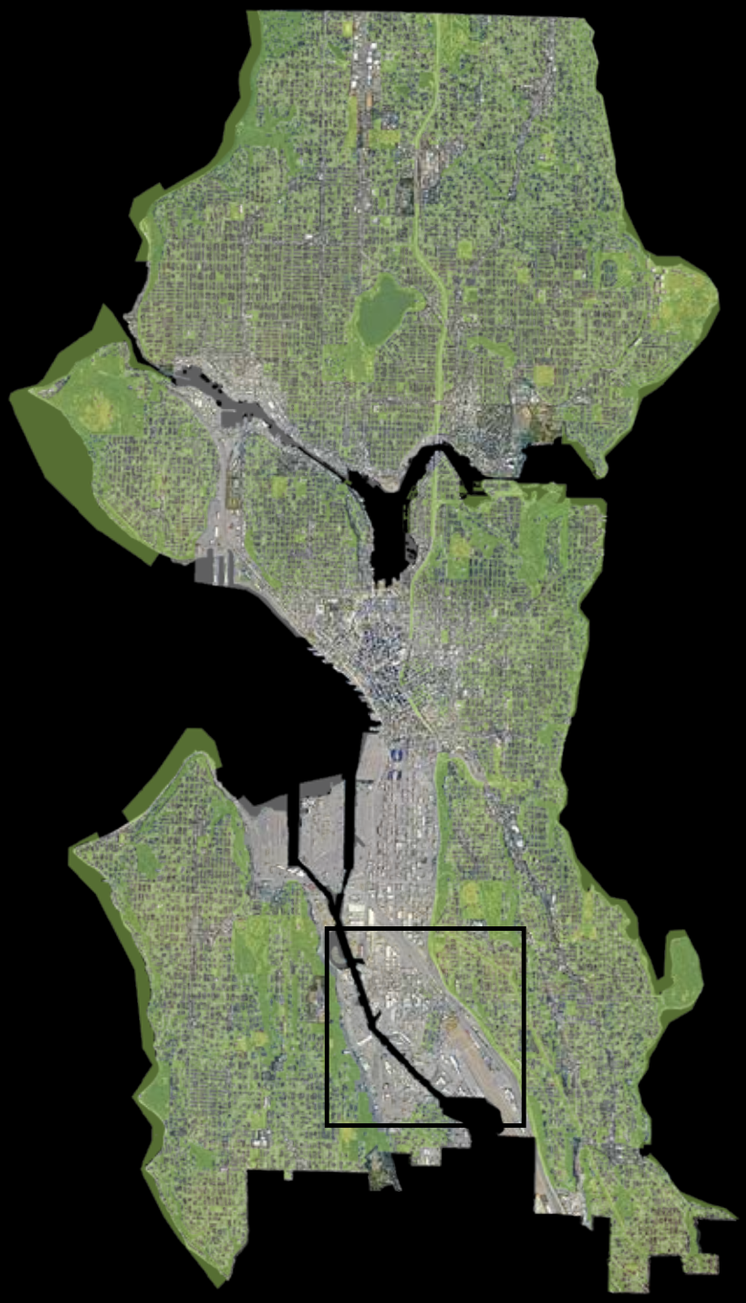
- **Housing discrimination in 1940 can still be seen at the city scale in 2023**
- **Seattle ranking 6th in the U.S. major city data filtering process (National Scale) there are still incredibly uneven distributions to sport space**
- **We could be so much better at planning for sport space if actual GIS datasets existed for them**
- **This process becomes more and more complicated as complexity increases with scale**

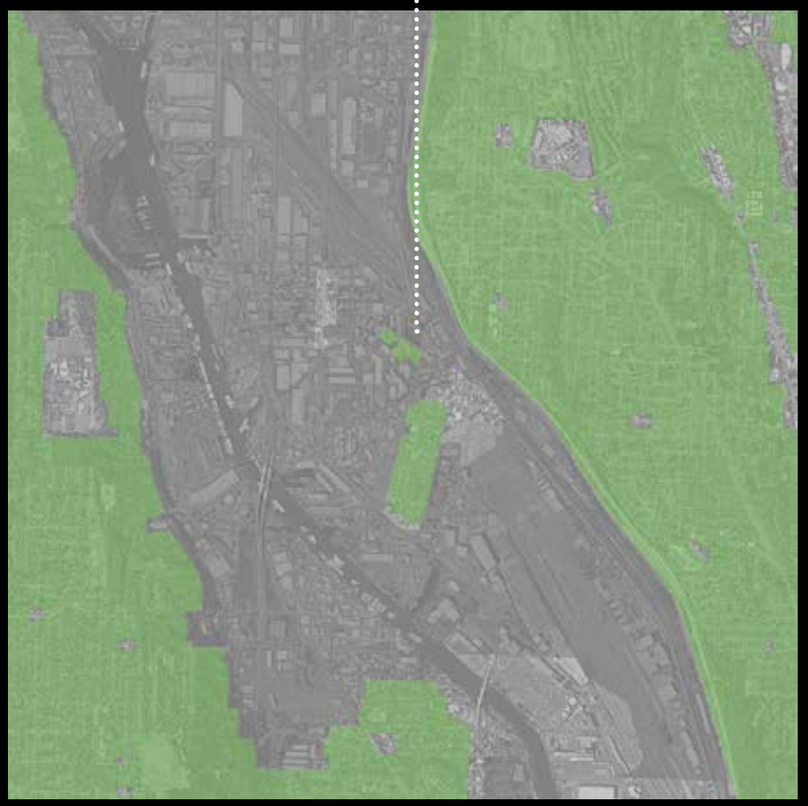
Softwares used:

Google Earth, Google MyMaps, Mapping InEquality by Richmond U and MapBox, QGIS, ArcGIS Web Browser

Summary Steps:

1. Take your city and organize it by district
2. Start rganizing each districts data based on demographics, health statistics, and economics
3. Map/locate current facilities for sport (i.e. schools, golf courses, recreation centers, etc.)
4. Layer open space and natural area data
5. Look for areas where there are systemic scars putting residents more at risk of quality-of-life leisure activities





ANALYSIS

*SCALE **03**: THE DISTRICT SCALE*

S

GEORGETOWN

SP

ECONOMICS

INCOME

ENVIRONMENT

PARKS
WILDLIFE
STREET TREES
VEGETATION

DEMOGR

RACE
EDUCATION
PRIMARY LA
AGE
HEALTH

N ANALYSIS

PORTS

RAPHICS

N LEVEL
ANGUAGE

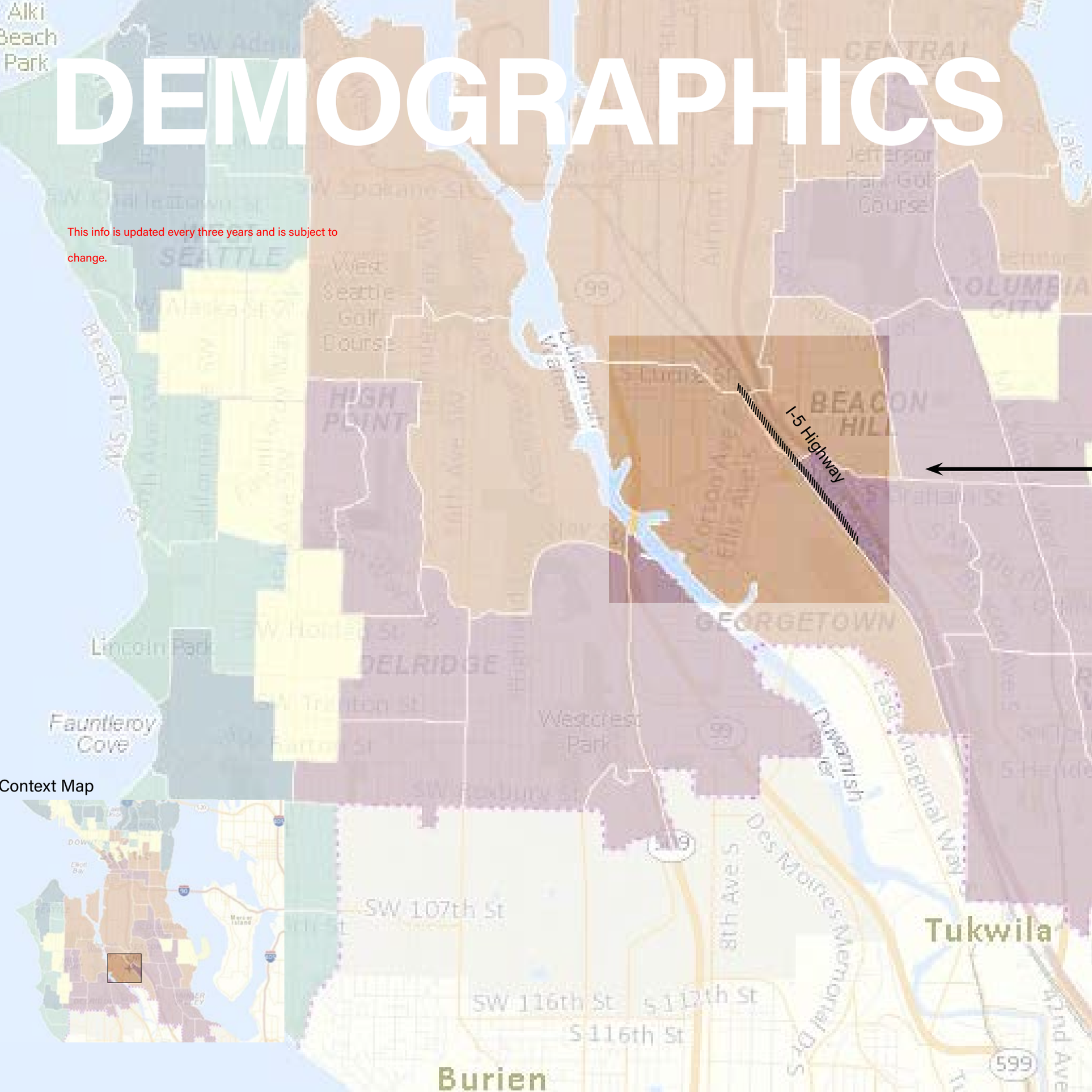
INFRASTRUCTURE

SPORTS FACILITIES
PUBLIC SCHOOLS
PRIVATE SCHOOLS
TRADE SCHOOLS
STREETS
TRAILS
ZONING
SIDEWALKS

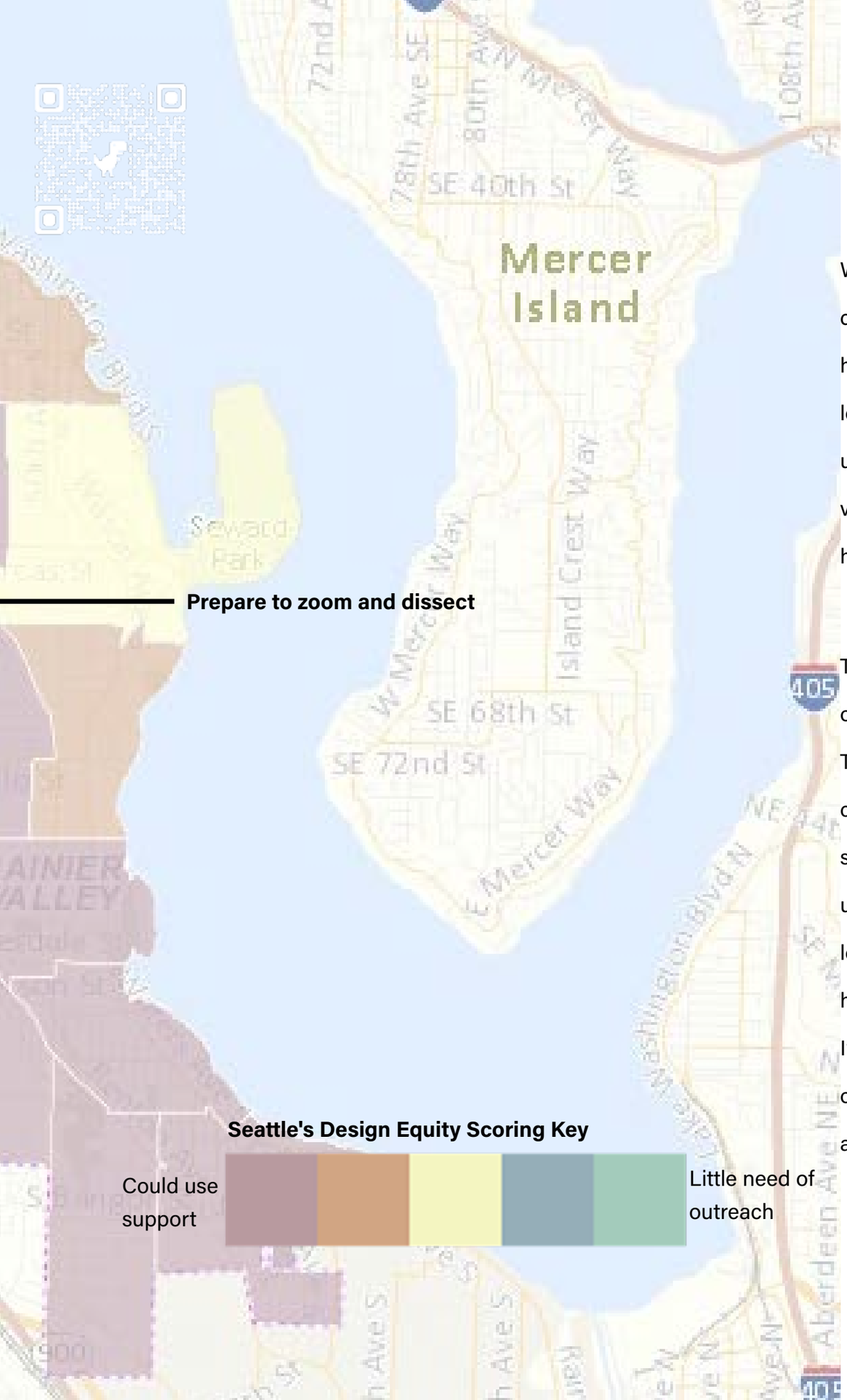
CULTURE

DEMOGRAPHICS

This info is updated every three years and is subject to change.



Context Map



What I tried to do with this map was dissect this demographic data, on this incredibly notable i5 highway border. For total transparency I first began looking at this data in 2022, and it's recently been updated so yay but no yay, the Greater Duwamish valley portion actually was moved to a brown, I have theories about mostly impacts of COVID.

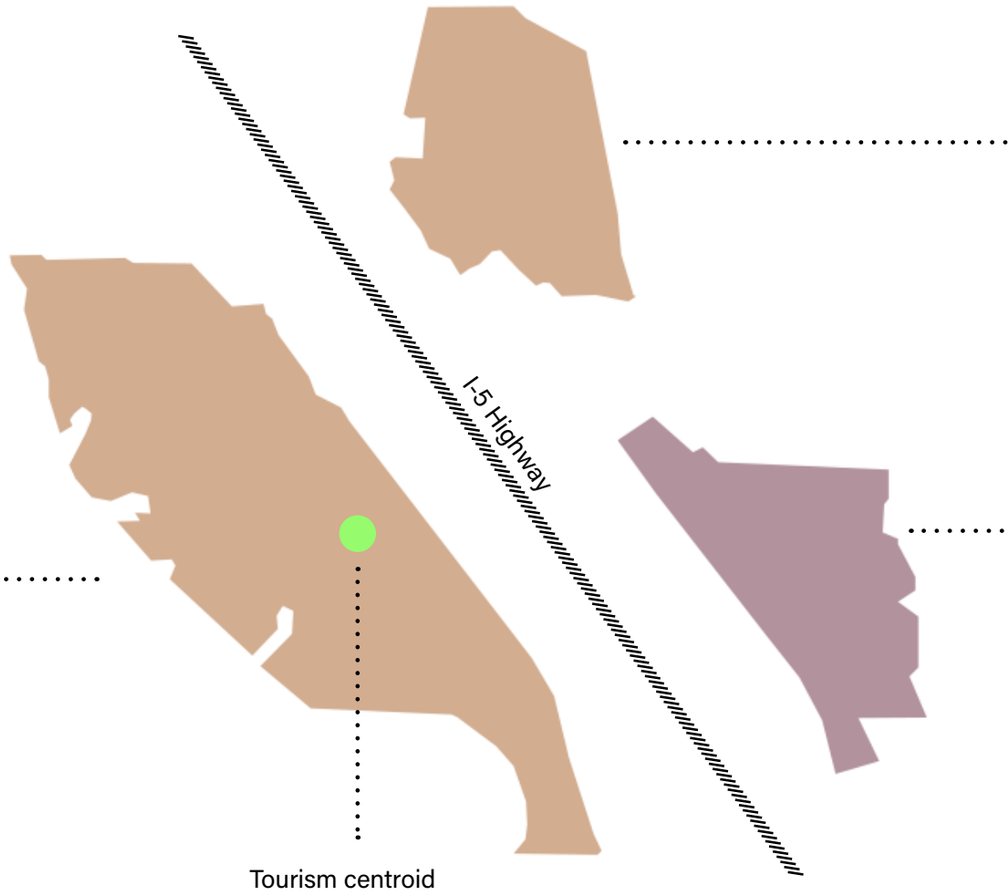
This is where a lot of my research and exploration on sport design and parks started to tap in. There was a study done in the U.S. where a city proposed two solutions, one to dropping a sport center facility into a community that was underprivileged, to remain walking distance to locals yet drivable to kids and or parents who had cars. It was great, but im not doing that, I'm making parks not buildings and the threats of gentrification on our project interventions is always lingering.

DEMOGRAPHICS

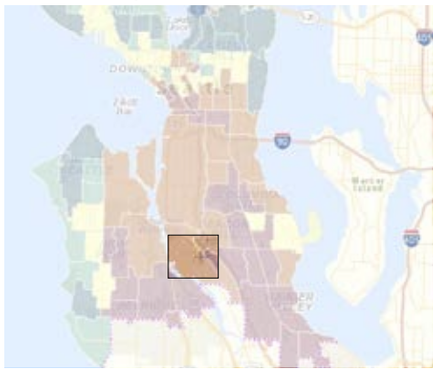
Georgetown Brown

25.2% people of color
26% below poverty line
2.4% foreign born
avg age 39.3

625 households



Context Map



Beacon Hill Brown

75.6% people of color
9% below poverty line
2.2% foreign born
avg age 40.3

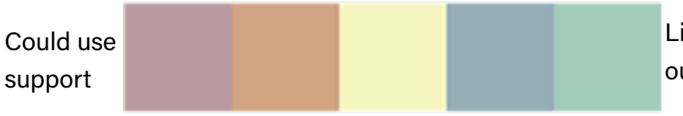
1,591 households

Beacon Hill Purple

91.3% people of color
53.6% below poverty line
52.1% foreign born
avg age 32.6

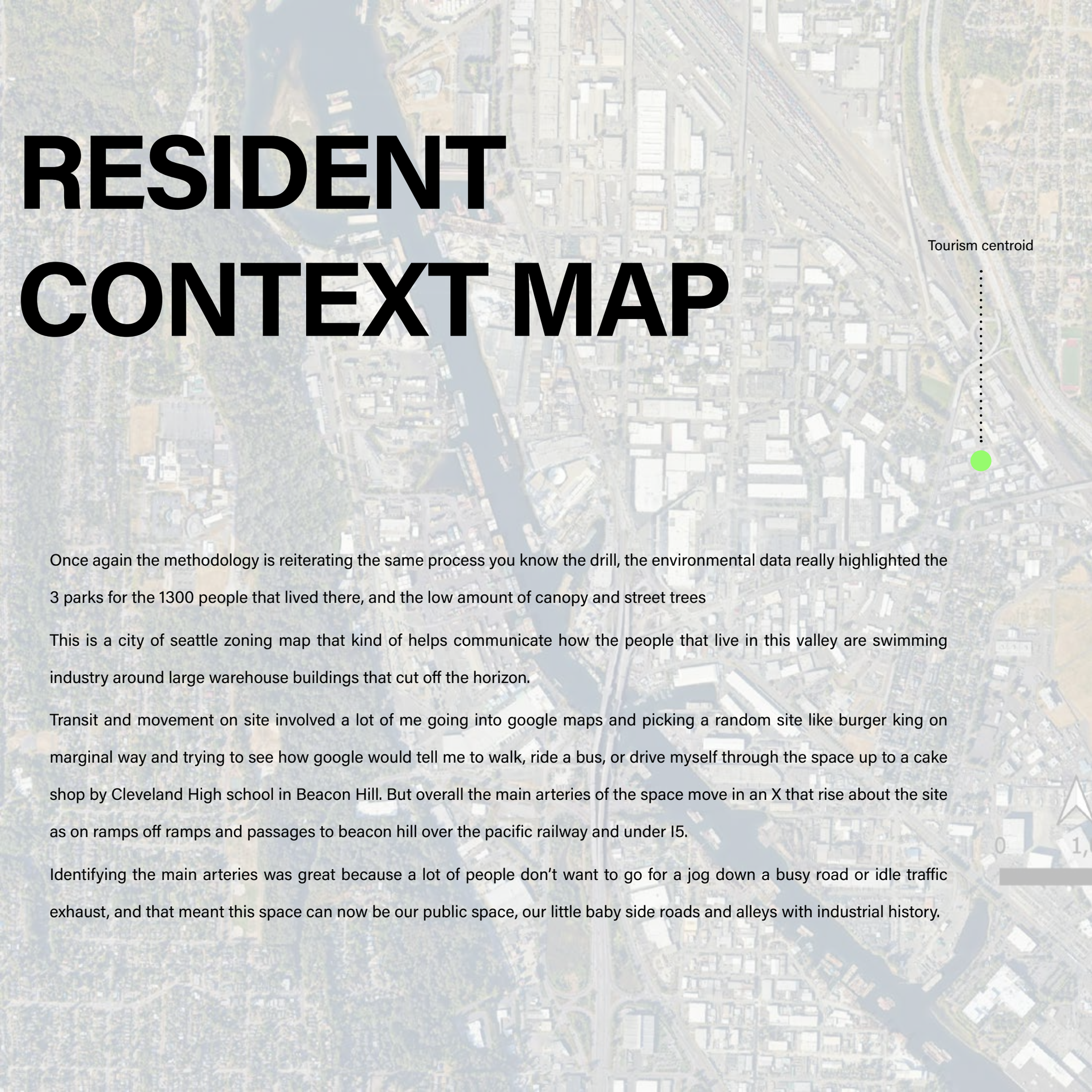
1,296 households

Seattle's Design Equity Scoring Key



What you see is this border of really unique community groups as well as economic standing. Previously when this area was yellow, I wanted to flip what that research showed, and put the park systems in walking distance from the people who may need it yet not disrupt their potential cost of living, in a way i5 kind of came in handy. There is a lot more to potentially jacking up home prices in an area but hopefully I can touch on it.

RESIDENT CONTEXT MAP



Once again the methodology is reiterating the same process you know the drill, the environmental data really highlighted the 3 parks for the 1300 people that lived there, and the low amount of canopy and street trees

This is a city of seattle zoning map that kind of helps communicate how the people that live in this valley are swimming industry around large warehouse buildings that cut off the horizon.

Transit and movement on site involved a lot of me going into google maps and picking a random site like burger king on marginal way and trying to see how google would tell me to walk, ride a bus, or drive myself through the space up to a cake shop by Cleveland High school in Beacon Hill. But overall the main arteries of the space move in an X that rise about the site as on ramps off ramps and passages to beacon hill over the pacific railway and under I5.

Identifying the main arteries was great because a lot of people don't want to go for a jog down a busy road or idle traffic exhaust, and that meant this space can now be our public space, our little baby side roads and alleys with industrial history.

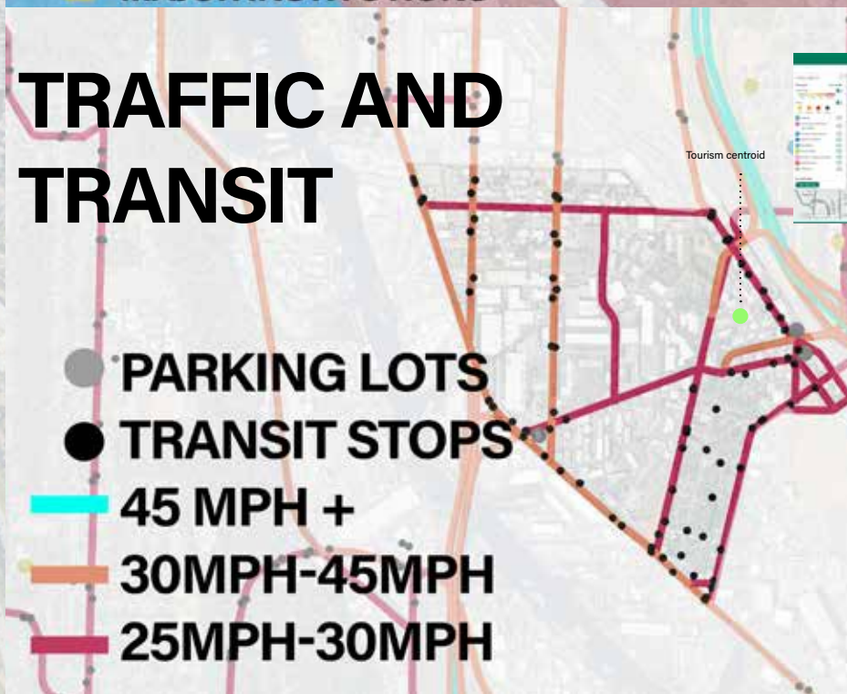
ENVIRONMENT

STREET TREES
GREENCOVER (NDVI)
PARKS

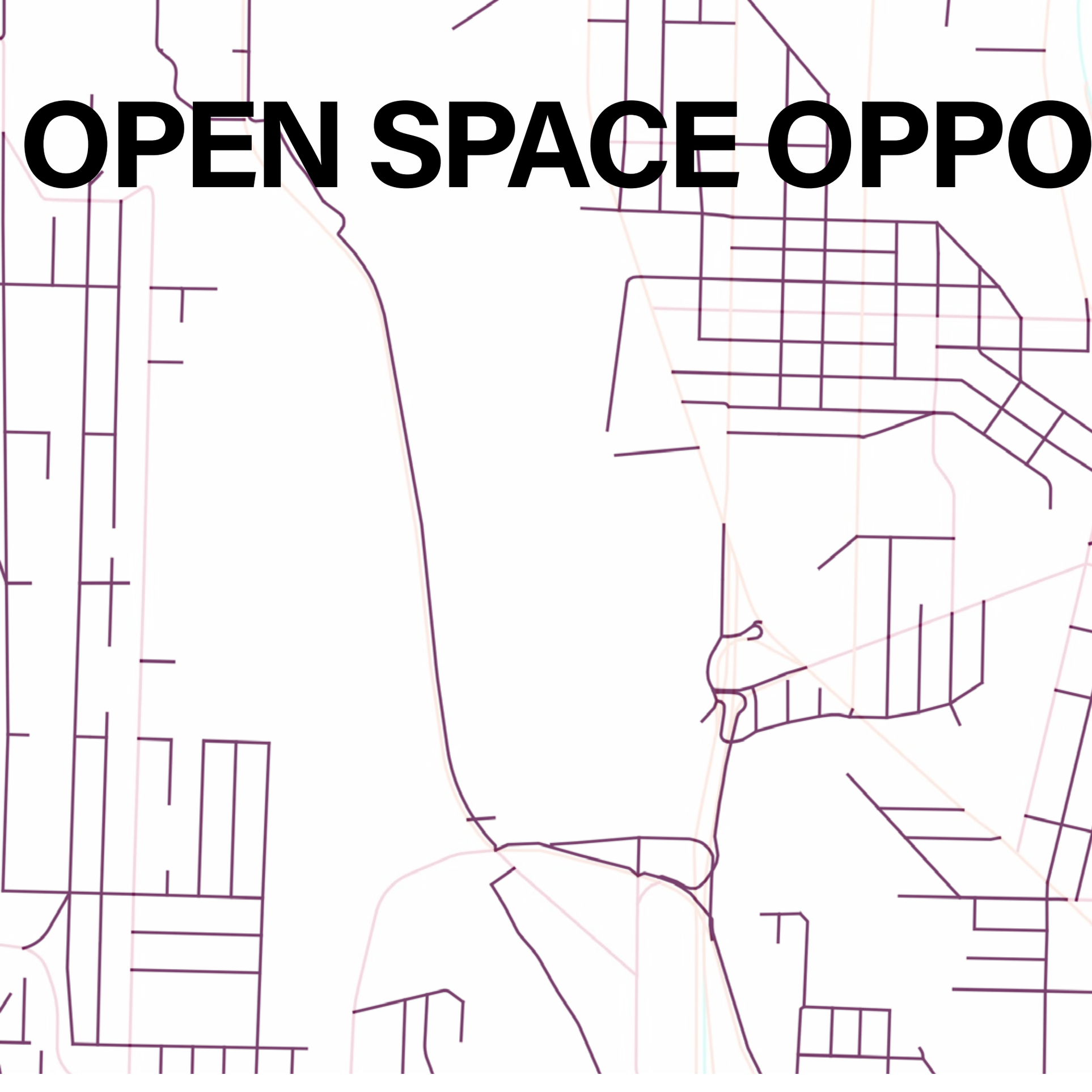
INFRASTRUCTURE

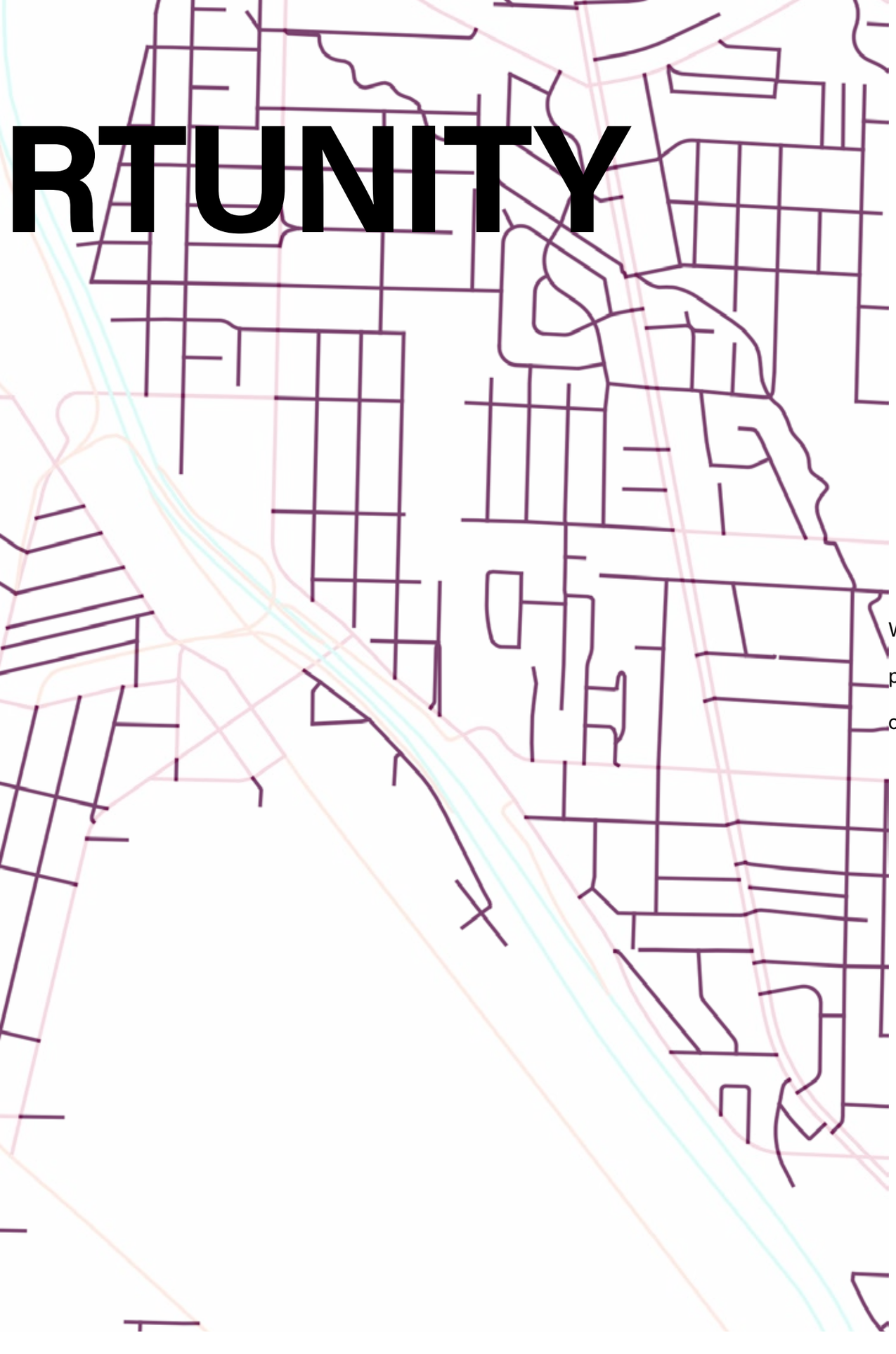
INDUSTRIAL
LOWRISE MULTI FAMILY
NEIGHBORHOOD COMMERCIAL
NEIGHBORHOOD RESIDENTIAL
COMMERCIAL
MAJOR INSTITUTIONS

TRAFFIC AND TRANSIT



PARKING LOTS
TRANSIT STOPS
45 MPH +
30MPH-45MPH
25MPH-30MPH

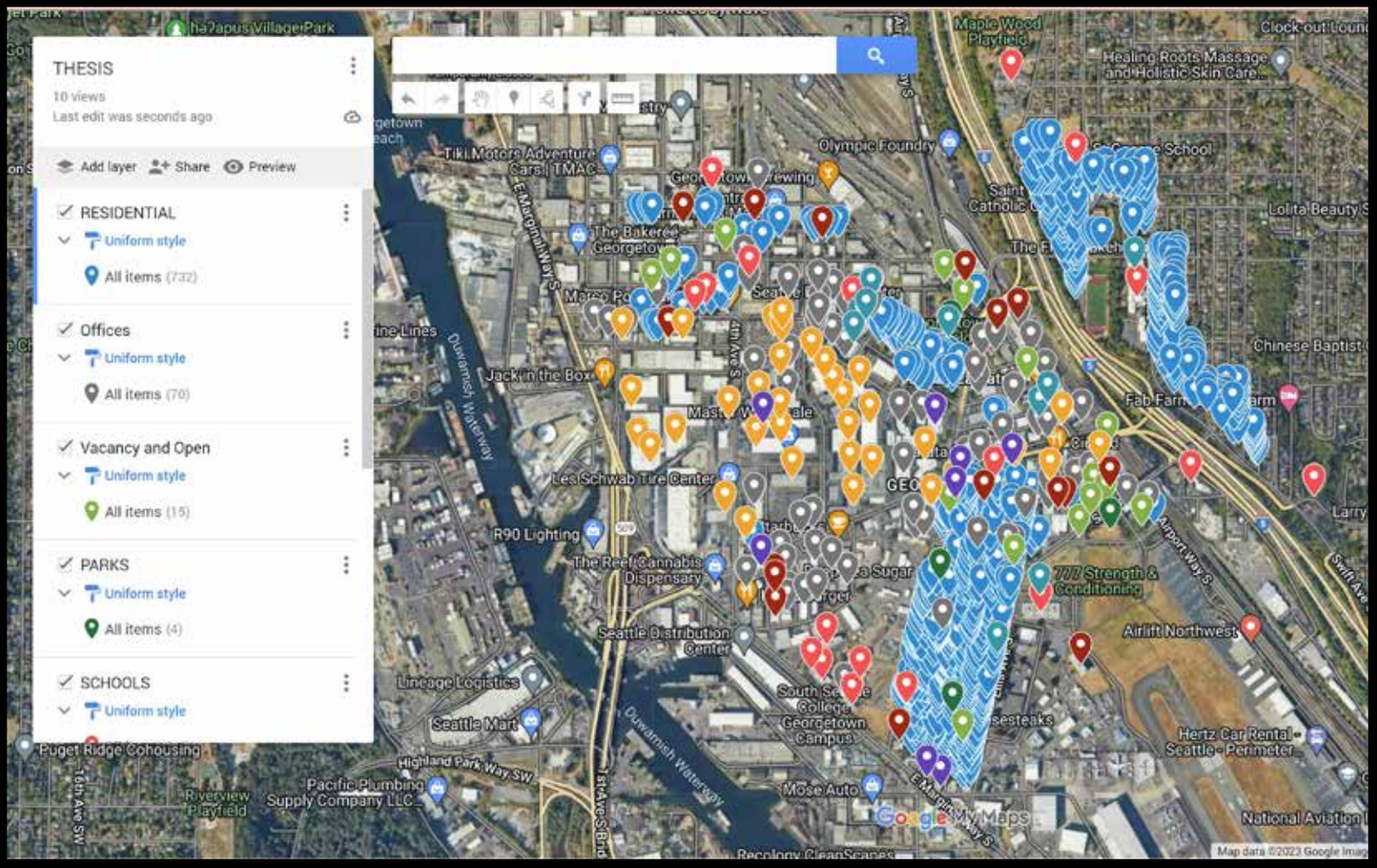

OPEN SPACE OPPO



RTUNITY

When we start to view the streets as our public space, we can isolate our areas of opportunity.

ADDITONAL DATA CREATION



I quickly realized so much of what I was seeing in GIS wasn't displaying how much I could see on Google Earth, so I started implementing Google MyMaps to actually annotate the site accordingly. To make it tell the story of what is happening here.

This process involved 2 monitors, with GIS, Google MyMaps, and Google street view all trying to get an accurate depiction of is that a house, is it an art studio, is it a restaurant for a 300 acre area.

The most vibrant data I could find was of the people that made this space their place. Art walks, beer tours, wine tasting, summer street markets, p-patch produce selling, the people were here and they are so cool. This is the data that can't be quantified.

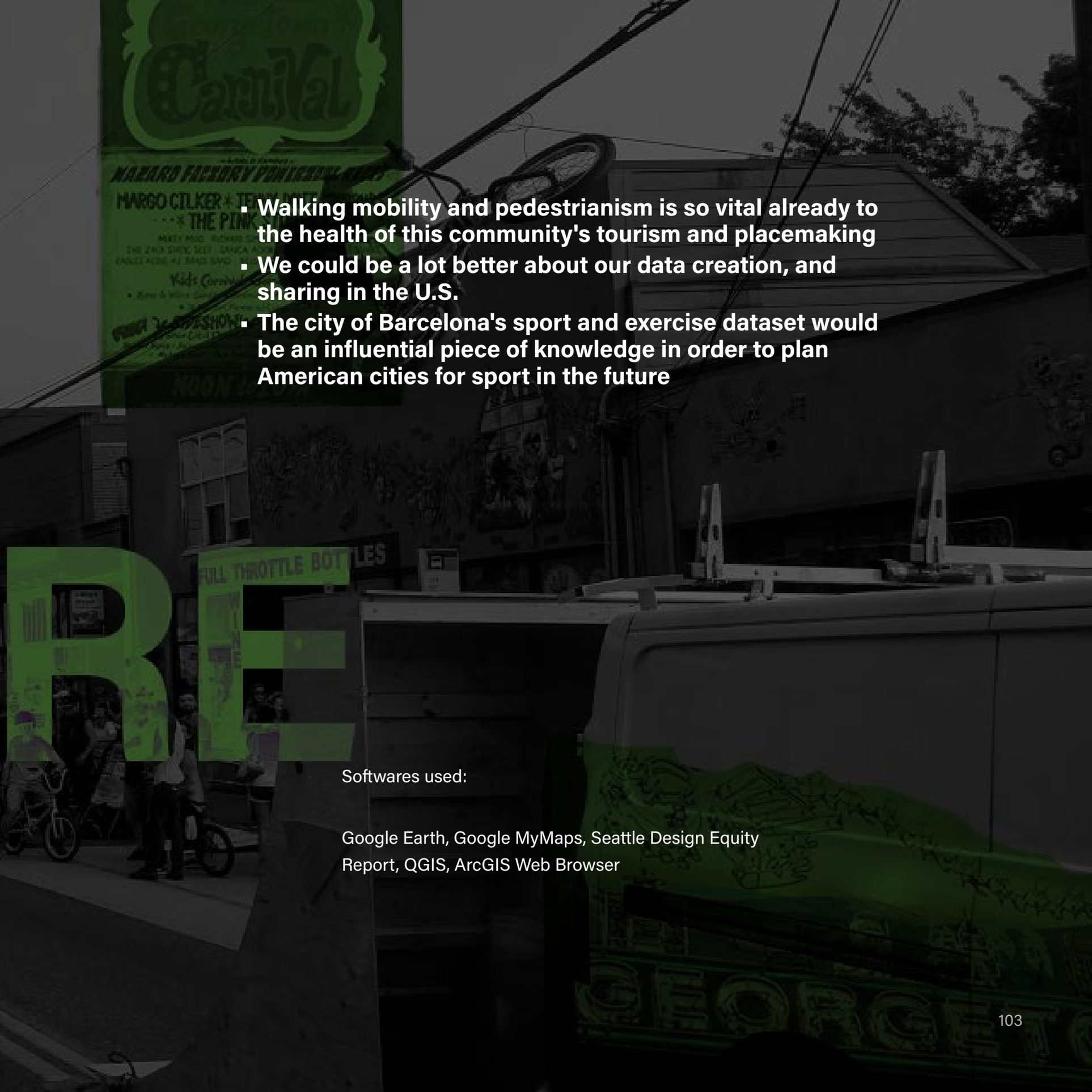

Carnival
MARGO GILKER
THE PINK
NOON to 10pm
FULL THROTTLE BOTTLES
WINE
RE
GEORGET

TAKEAWAYS

- **The current mobility of the site moves in an X, and allows for potetnial pockets of movement beneath existing ramps over and under I-5**
- **The zoning and infrastructure in GIS doesn't even compare to the reality of the space and the value it holds for it's local residents and visitors**
- **Common events in the area have already taken to the streets and adjusted traffic for markets, art walks, and other local gardening events. Sports and reinforcement of sport presence could fit in nicely.**
- **Street trees are lacking in a hot parking lot filled area**
- **GIS, Google Earth Google MyMaps, and Seattle Parcel viewer will never be able to communicate whats actually happening with the people in a place**

Summary Steps:

1. Take your district and begin to understand how the people use it
2. Understand where people may collect in regards to the greenspace
3. Consider how zoning can influence community collection
4. Analyze the impact of cars to the pedestrian, because this could lead to potential road change proposals
5. Don't forget to investigate the culture of the residents, the site begins and ends with people always. Begin considering what type of areas or demographics could support different sport types



- **Walking mobility and pedestrianism is so vital already to the health of this community's tourism and placemaking**
- **We could be a lot better about our data creation, and sharing in the U.S.**
- **The city of Barcelona's sport and exercise dataset would be an influential piece of knowledge in order to plan American cities for sport in the future**

Softwares used:

Google Earth, Google MyMaps, Seattle Design Equity Report, QGIS, ArcGIS Web Browser

ANALYSIS

*SCALE **04**: THE NEIGHBORHOOD SCALE*

The most vibrant data I could find was of the people that made this space their place. Art walks, beer tours, wine tasting, summer street markets, p-patch produce selling, the people were here and they are so cool. This is the data that can't be quantified.

6 STEPS TOWARD DE

Informed design steps attached to the methodology to aid designing the sport opportunities of neighborhoods discovered in analysis. These steps are incredibly crucial for designing the site and connecting sport to place.

ESIGN

1

SOCIAL

SHED

2

PRESENT

PROGRAM

3

SHORTEST

WALK

4

OPEN-SPACE

POTENTIAL

5

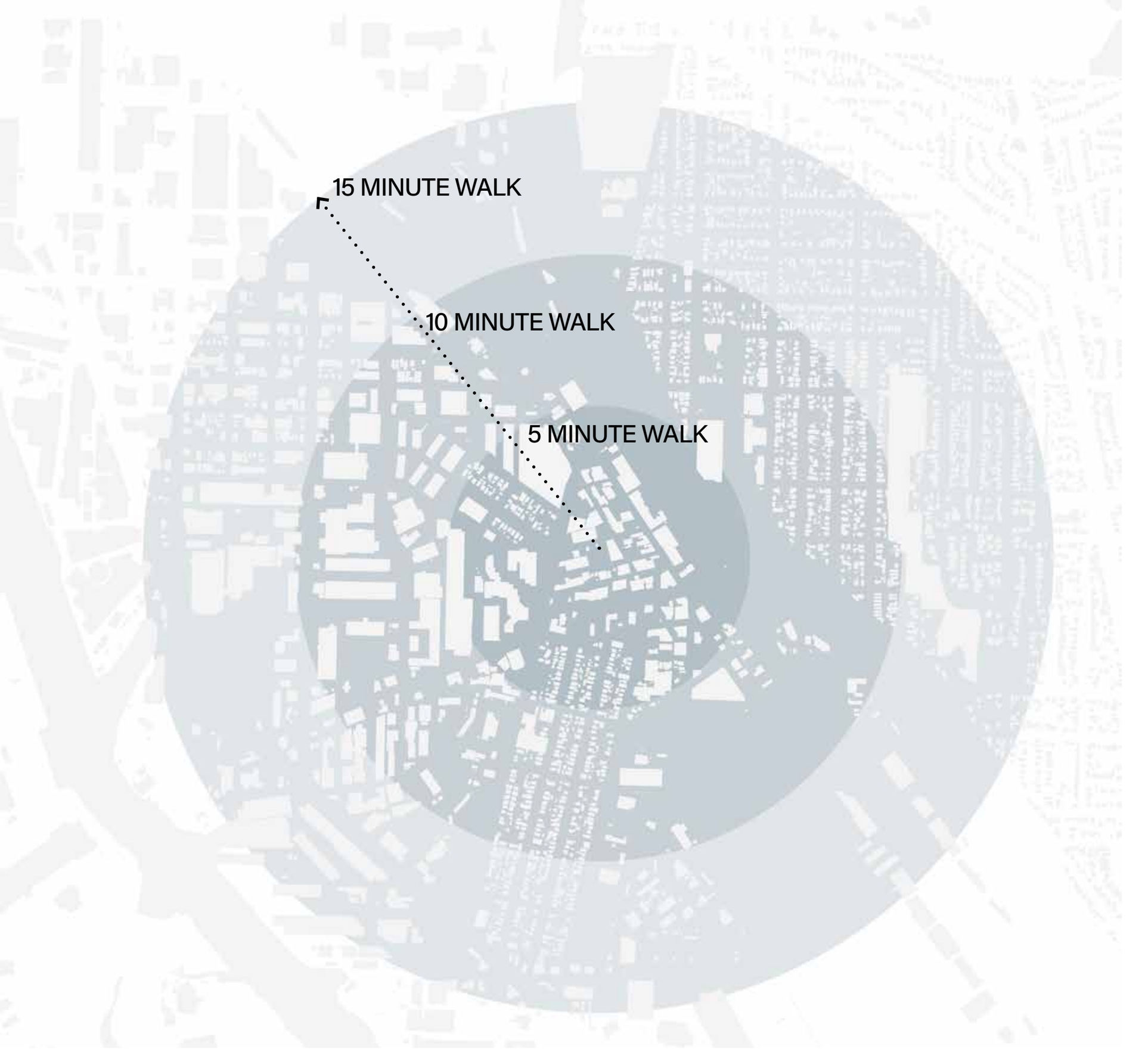
SYSTEM-SPORT

DESIGNATION

6

COMMUNITY

ENGAGEMENT


15 MINUTE WALK
10 MINUTE WALK
5 MINUTE WALK

1

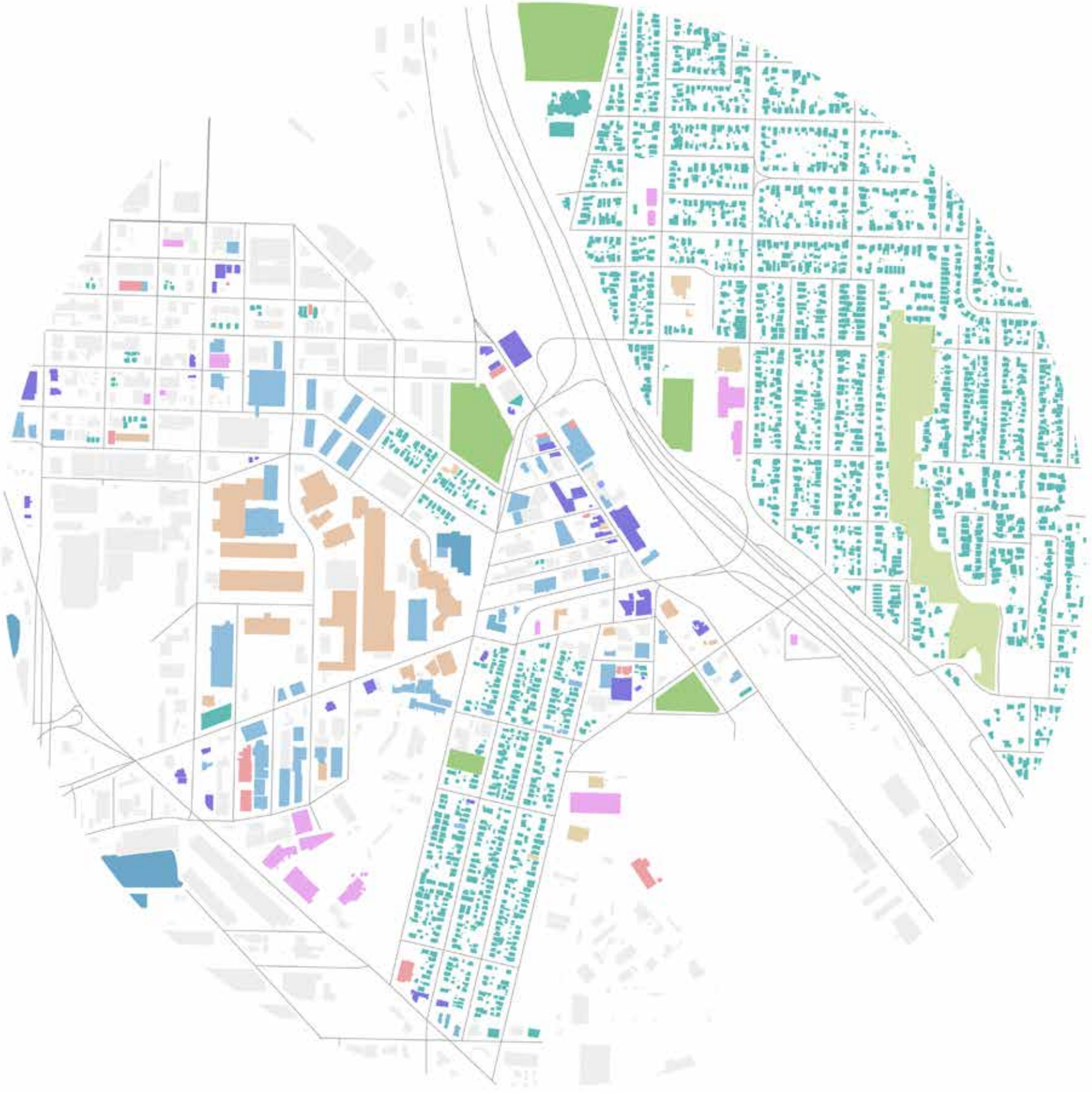
SOCIAL
SHED

I chose to determine my neighborhood center based on the collision of the two residential neighborhoods with the local tourism center. This area is then expanded touching the historic Van Asselt residential cluster, the historic Georgetown residential cluster, and the boundary between Beacon Hill. This area will become my focus area ranging predominately in the 10 minute walkable area.

2

PRESENT
PROGRAM

The second step then analyzes what kind of uses are existing within this system and 15 minute radius from residential neighborhoods. This allows for an understanding of how the existing system could attract designed areas catered to existing use. Embracing complexity is the goal, to use it as a guiding designer.



2

PRESENT
PROGRAM

40%
Industrial

20%
Residents

20% Businesses

10% Hospitality/Restaurants

10% Parks, Arts, Trade Schools

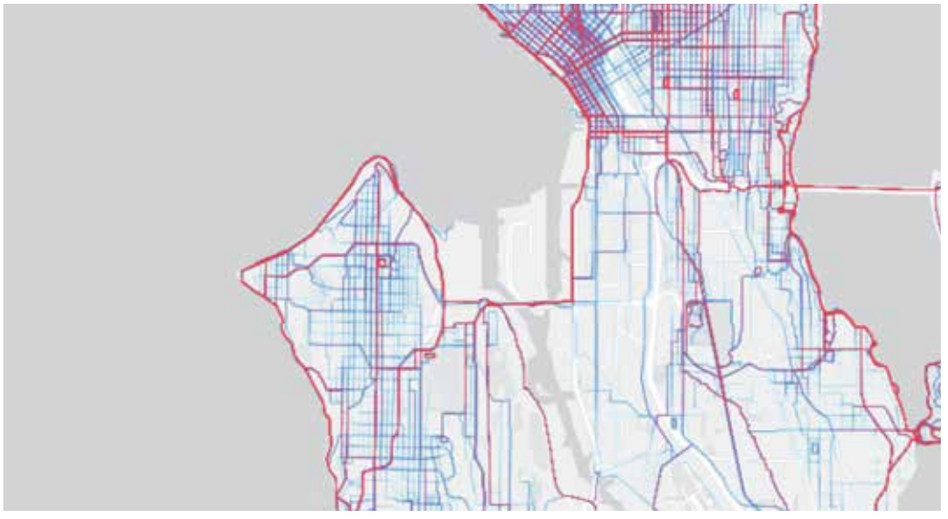
Shortest walk from offices to art studios and galleries to parks

3

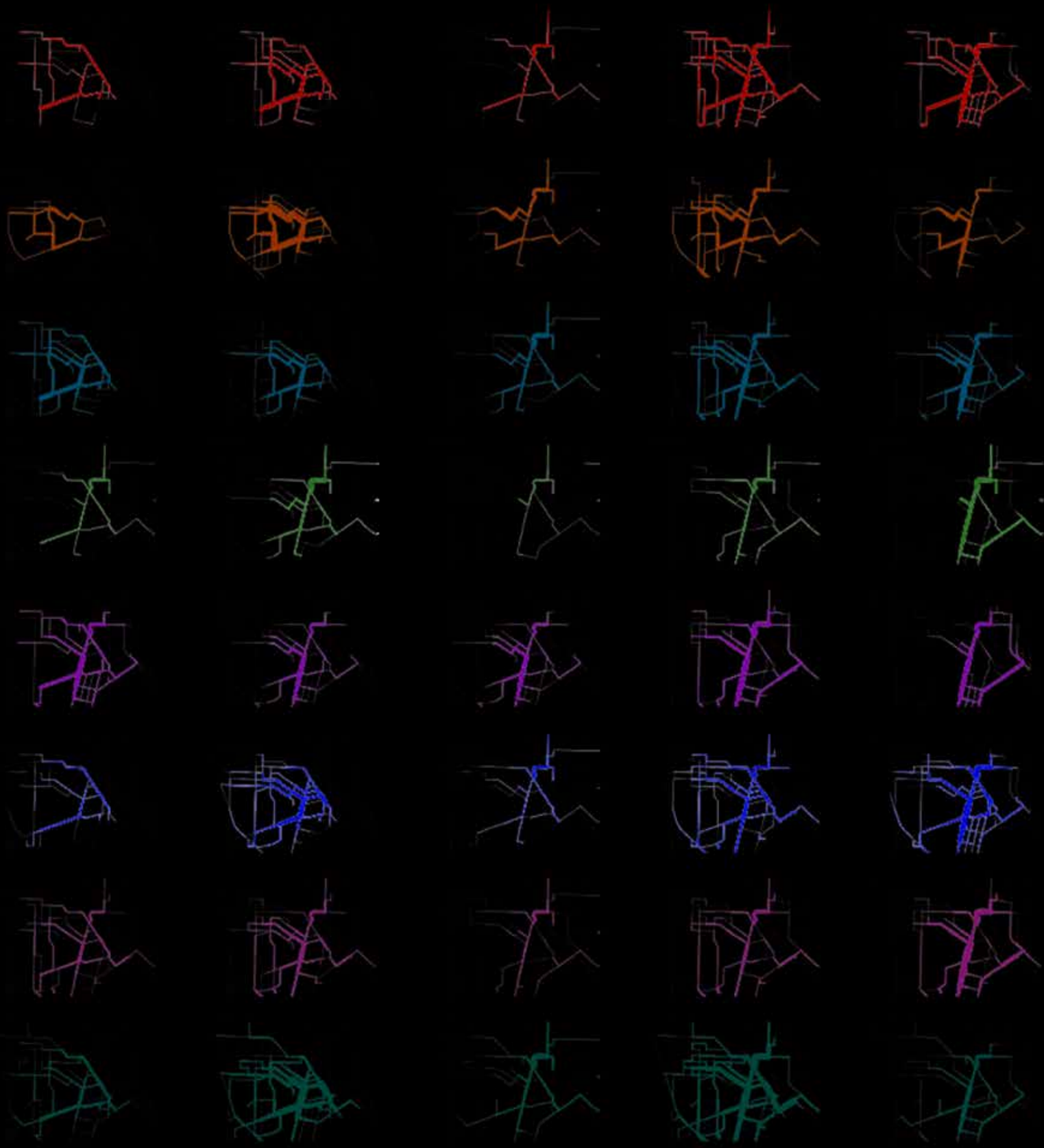
SHORTEST
WALK

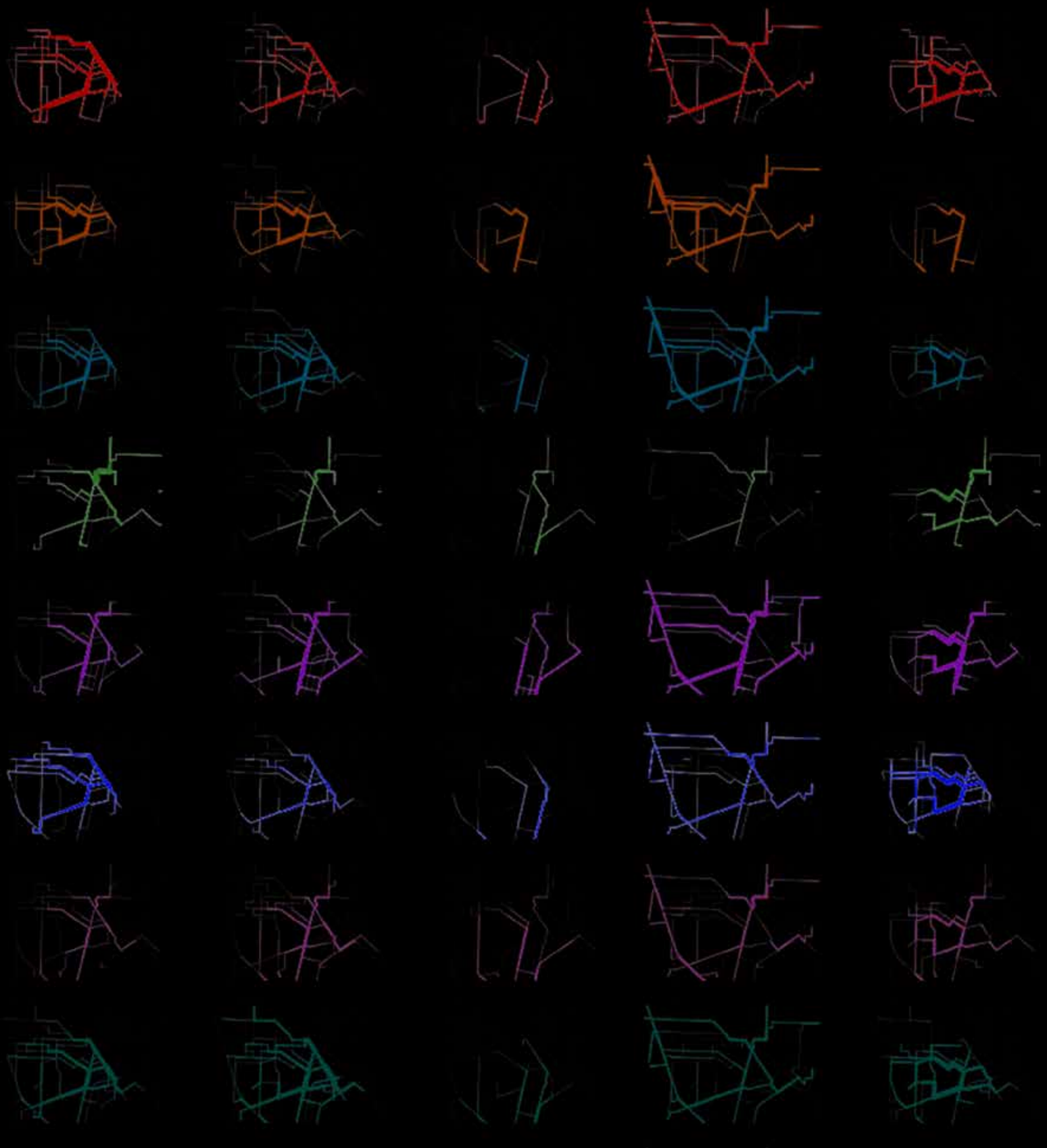
Engineered pathways using Rhino+Grasshopper allows for software based potentials between different points on site where people may move by foot in the most efficient way possible. This allows for hypothesizing of where street design implementation of sports to encourage and support foot traffic in the area.

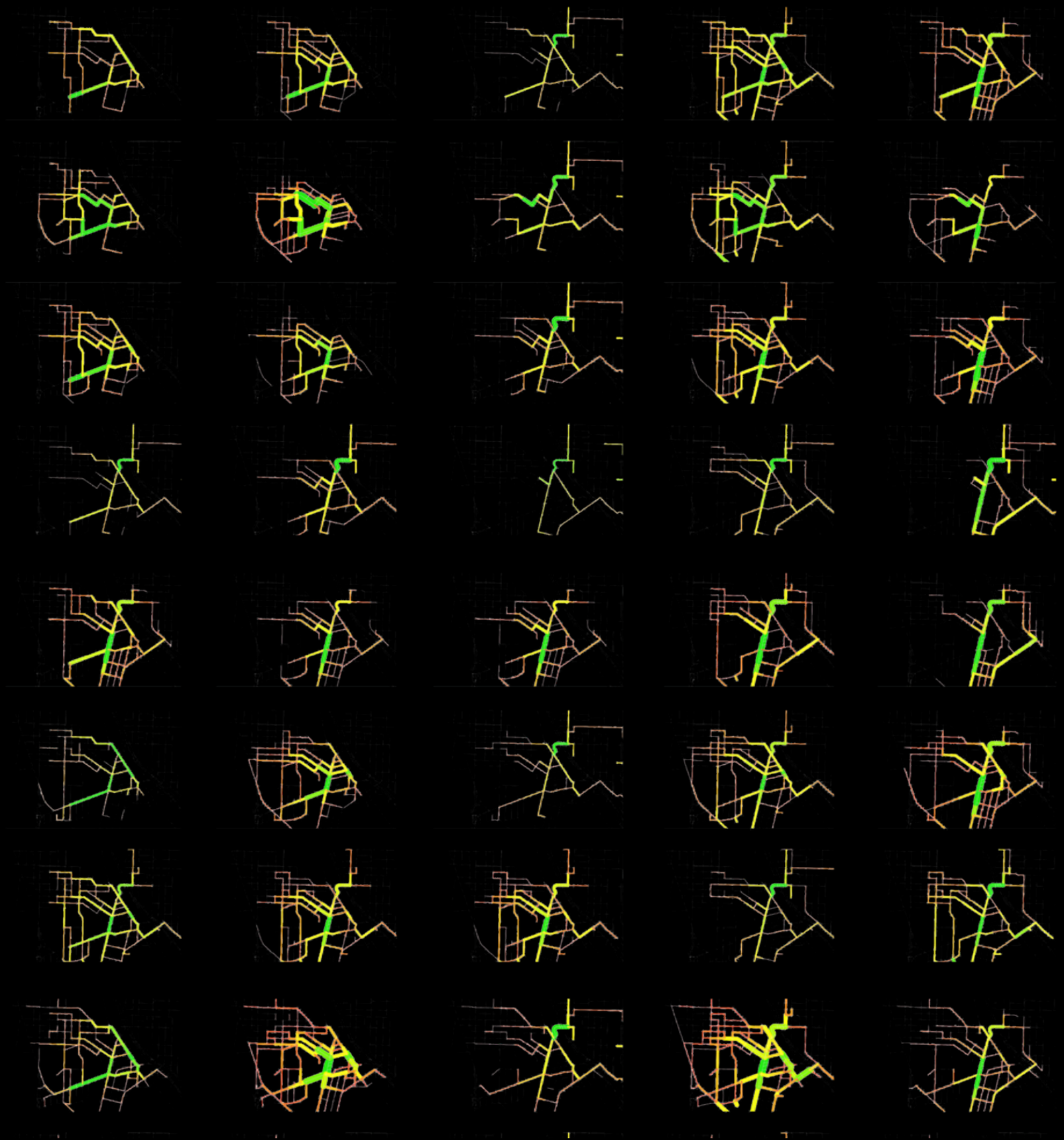
Strava Running Data

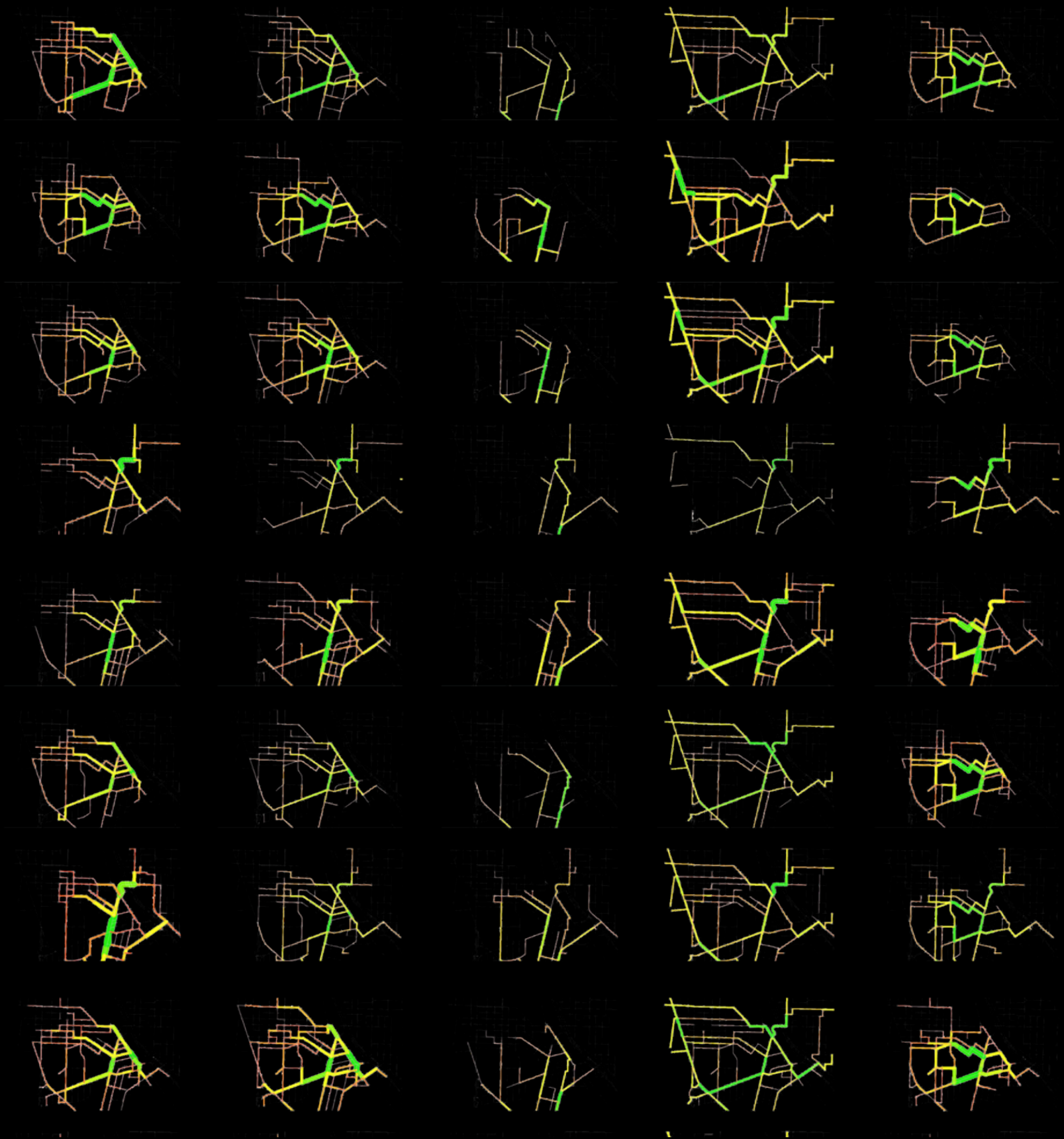


+









SHORTEST

WALK

4

OPEN-SPACE
POTENTIAL

Determining existing open space is important for understanding where a city can expand and think creatively about public space in the area. In this area, underutilized vacancy through Google Earth, Google MyMaps, and Seattle Parcel Viewer

4

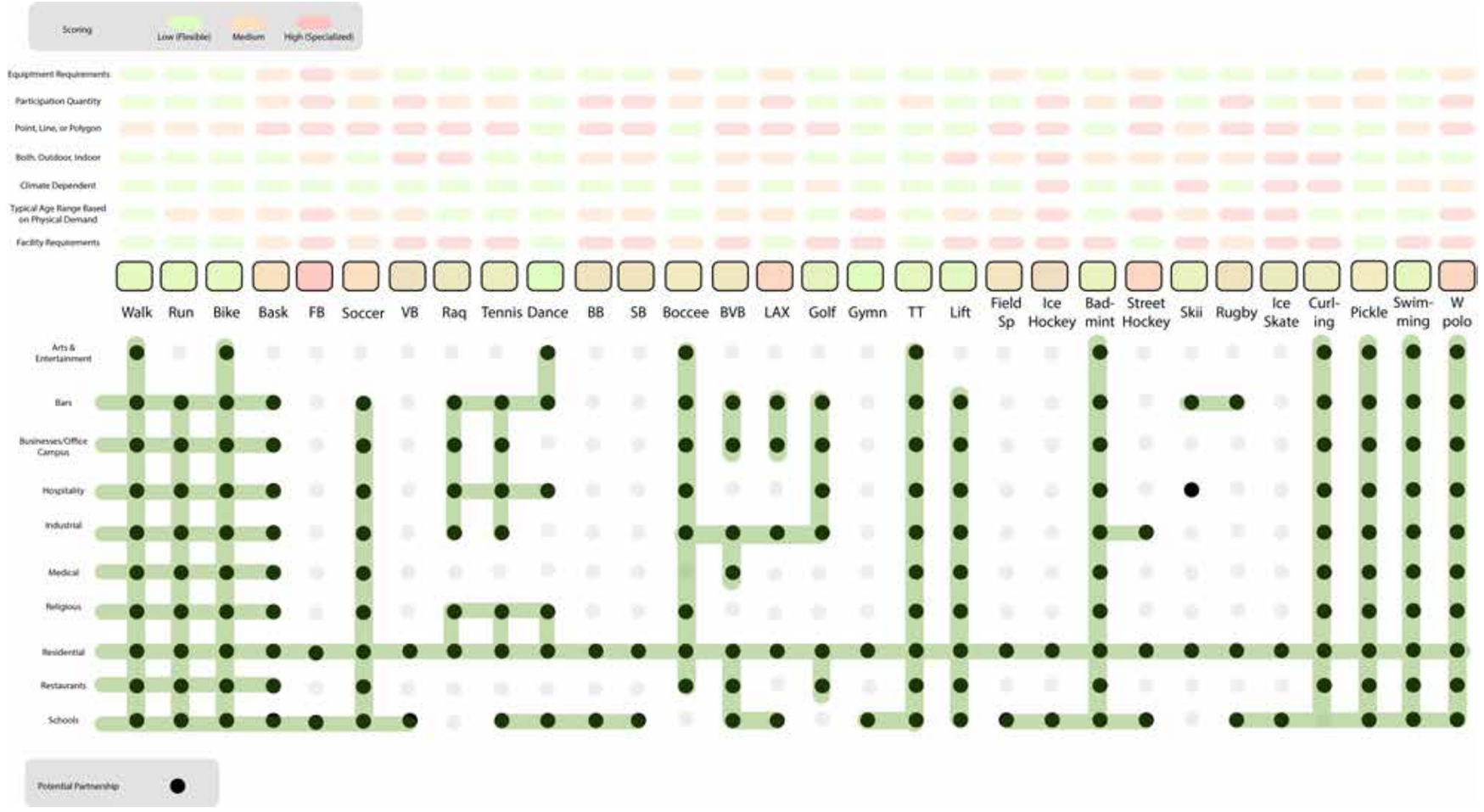
OPEN-SPACE POTENTIAL

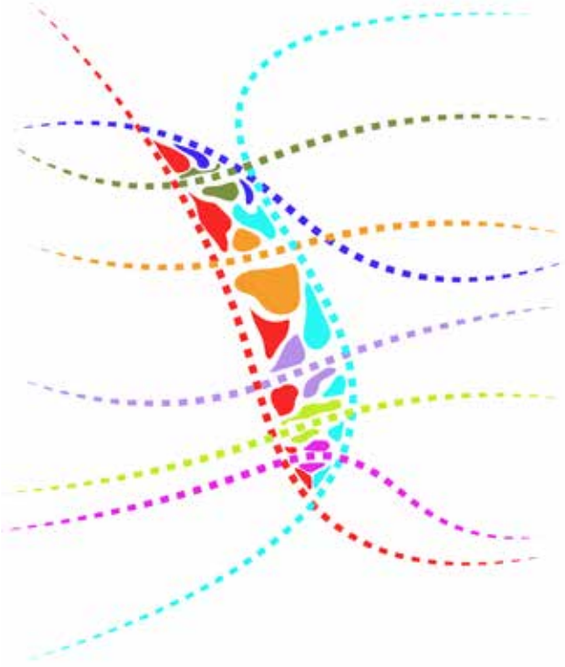
Determining existing open space is important for understanding where a city can expand and think creatively about public space in the area. In this area, underutilized vacancy through Google Earth, Google MyMaps, and Seattle Parcel Viewer, then combining with shortest walk to find opportunity.

5

SYSTEM-SPORT
DESIGNATION

Selecting particular sports that could be enjoy based on their chosen paths and demographics in a space.


Scoring
Low (Flexible)
Medium
High (Specialized)
Equipment Requirements
Participation Quantity
Point, Line, or Polygon
Both, Outdoor, Indoor
Climate Dependent
Typical Age Range Based on Physical Demand
Facility Requirements
Walk
Run
Bike
Bask
FB
Soccer
VB
Raq
Tennis
Dance
BB
SB
Boccee
BVB
LAX
Golf
Gymn
TT
Lift
Field Sp
Ice Hockey
Bad-mint
Street Hockey
Skii
Rugby
Ice Skate
Curl-ing
Pickle
Swim-ming
W polo
Arts & Entertainment
Bars
Businesses/Office Campus
Hospitality
Industrial
Medical
Religious
Residential
Restaurants
Schools
Potential Partnership



5

SYSTEM-SPORT
DESIGNATION

Selecting particular sports that could be enjoy based on their chosen paths and demographics in a space. Create a map and lcoate where all of these possibilities for sport can occur.

DESIGN

NON-PROFIT COMMUNITY GROUP OPPORTUNITIES FOR POST-INDUSTRIAL RETHINKING FOR COMMUNITY EXERCISE

THE DUWAMISH TRIBE
THE FIRST PEOPLE OF SEATTLE

dxʷsəq̓ʷəb

PROJECT BACKBOARD
ART, WORK & BASKETBALL

the Fresh Air fund

SSC
Seattle Sports Commission

6 *COMMUNITY* ENGAGEMENT

50% TEAM

10% INDIVIDUAL

20% OPEN SPACE

20% COMMUNITY SPECIFIED

Now that you have followed steps 1-5 you can have this maximized outcome where you and the community can say of this potential what sports would be fun for you and how will we get there? Do you have non-profits interested in buying this vacant space, are you interested in some? Overall step 6 is be a good listener, and maybe just make all those flexible green space where a kid can do some cardio training.

TAKEAWAYS

- **Being able to read what the landscape is telling you holds just as much value as to what the people are telling you**
- **Look for ways the community is already placemaking and tie exercise into it. Beer and wine tours promote walking, Georgetown P-Patch gardens promote a healthy relationship with nature, they should blend together.**
- **There is so much opportunity spatially to implement a larger system of sport integration through street design, as well as vibrant community activity**
- **The location negatives can be looked at as positives for seasonal intervention, like underline sport spaces as infrastrucal canopies out of the rain.**
- **GIS sport data needs so much love. Let me help please.**

Summary Steps:

1. Identify how much enviornmental canopy and green space is needed for the district youre focused on
2. Consider what space can now be freed up for public use instead of vehicular
3. Begin understanding how transportation by vehicle helps your system function
4. Identify potential partners in ways that can promote physical health, and build new bridges between adjacent communities, mixing is good
5. Do whatever you can to make your data accurate, investigate, and build your network through all softwares and resources
6. Dont be afraid to break the current system, especially if it means removing power from the SOV

Softwares/Materials used:

Google Earth, Google MyMaps, Rhino, Grasshopper, GIS
Adobe, Seattle Parcel Viewer, NHANES Sports based
on Ethnicity Race and Income for Obesity Data, Reddit,
Facebook, Instagram, Twitter

DESIGN + IMPLEMENTATION

SCALE **05**: *LETS PLAY*

What Casas Valle gives us is this understanding of how sport is stressed by space, and games often have measurement restrictions on them so they see a lot of pressure. They are an after thought, or they are moved outside city limits which stressed inequity of who can afford to get there and use them.

"By continuous urban development and densification of the existing city many sports facilities get under pressure spatially (Van der Ploeg 2010, Bosch 2009 pp. 44-53).

This results in translocations of sport fields toward city edges, because of building construction opportunities. Parallel, the spatial quality of many sports facilities is often bad and ugly (Van der Linden 2009): no proper spatial planning, mono functional, unattractive and anonymous architecture, badly embedded in the neighbourhood, hidden behind closed green areas, little or no relationship to public space; sport (parks) are often isolated from its urban surroundings."

-Daniel Casas Valle, *Sport in the City*

DANIEL CASAS VALLE

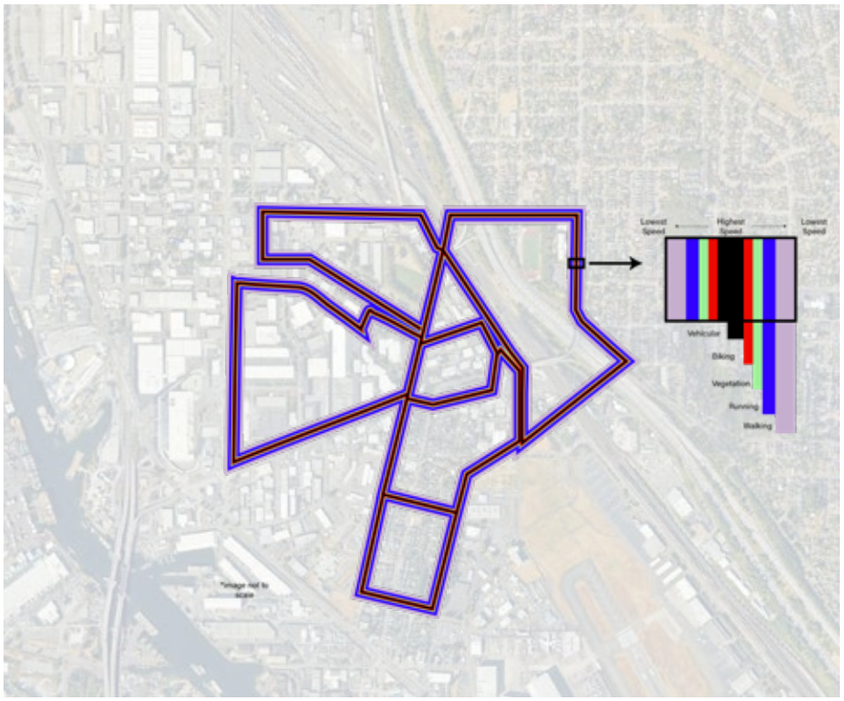
Urban Designer and Researcher
Urbandynamics, Portugal


Basketball
Schools to Parks
Climbing
Parks to Wildlife
Dance
Arts to Residents
Pickleball
Businesses to Parks
Skateboarding
Schools to Residents
Table Tennis
Soccer
Residents to Parks
Volleyball
Parks to Restaurants

7
1
3
5
2
4
6

After understanding what is now a masterplan area I needed to make this site and it's organization a bit more digestible. Moving from open space, to suggested sport implementation areas, to how it could directly be applied spatially I chose to break this area down into 7 areas.

PROCESS



PHASING, RUNNERS LOOPS, AND CIRCULATION

Phasing adds control over a 300 acre area. This will assist in Masterplanning.

Our shortest walk also offers the ability to analyze runners loops. This is beneficial for the athlete and street design.

in order to move throughout this space to consider sport use is running. Running, biking, and transport-sport would accommodate the current issue of lack of canopy in the space, while proposing a speed hierarchy onto these area boundaries. By minimizing space and assigning the predominant space to the pedestrian this requires site analysis.

"1. Customization – sport as an urban meeting place

a. When a sport place combines different aspects of the toolbox, it can have a role as an urban meeting point, for people of the street, neighbourhood, city or region. For the topic ´sport as a social meeting place´, it is important to open-up the sport planning.

2. Increase sport inclusive thinking

a. In the perspective of the active or healthy city model, sport plays a significant part. Therefore, it should be logic to promote ´sport inclusive thinking ´in planning. Not as a ´separated functionality´, but as one of the important activities that improves the living quality in general. It should be logic to think about sport potential and possibilities in every urban spatial and urban plan, as it is for individual motorized mobility.

b. There is a culture clash between spatial planning and sport planning. Differences as: specific interests, planning periods, investment flows, political departments, development logics, technical requirements, laws and regulations and professionals should be discusses."

-Daniel Casas Valle, *Sport in the City*

DANIEL CASAS VALLE

Urban Designer and Researcher
Urbandynamics, Portugal

"1. Sport Size/typology

2. Position in the City:

a. Combine large complexes and stadia with things like restaurants, shops, hotels, and music venues for a larger economic value to small businesses.

b. Think about the diversification of uses by creating an urban hub, while diversifying the crowd who can use it (aka different sport types, accessibility, shade/ comfort etc.)

c. To attract visitors sport should be visible

3. Relation with public space

a. The connection and relationship between the sport entrance and city context is essential

b. Space manipulation can turn a "purely-functional place... into a versatile, well-used urban place"

4. Visibility

a. "The visibility-aspect of today's sport creates the need for a stage. Watching, showing and chatting, making sport a social place where people can meet. Striking design enhances the image of sport."

5. Distance and Proximity

i. Connect the sport to the city life, enlarge the visibility of sport, create an attractive and safe public space that connects to the environment

ii. Stimulate multifunctional use

6. Accessibility

a. Create a slow traffic route with an attractive public space to encourage physical movement

b. Take note of cycle and vehicular parking to plan how people could move

7. Public Access and Lockability

a. Visibility does not have to suffer from closing off during particular hours, but consider how designs can function without daylight hour use (materials, etc.)

8. Flexibility

a. Designated flat, paved or lawn, open space paired with raised courts or surfaces can act as community gathering aside from solely sport play. Bi-product spaces for access like parking lots and walkways also serve as such.

Programmatic Goals

1. Sport Chains

a. Create as much cohesive interaction between different athletes as possible, combining organized and non-organized, individual and group, allows for more exchange

2. Create smart combinations

a. In Denmark hospitality and sport are deeply intertwined with the history of Kulturhusets

b. In America Sports bars and drinking culture of competitive nature are deeply intertwined lol

3. Program Mix

Organizational Aspects

1. Policy and Target Group

a. Mixing consists of different sports, library, playground, restaurant / canteen, hotel (for athletes), centre for sports, municipal sports department and a conference centre. This centre attracts different people and has an area of increasing function.

2. Use

a. On one hand, is multiple use is financially more efficient, on the other hand, the synergy between the users sometimes is overestimated. Clarity about the principles and goals of multiple use is important in the planning phase.

3. Maintenance

a. Requirement to use a sports facility efficiently is a good match of use by various users and associations. Money for professional maintenance and management is often lacking. Allowing new sports groups on existing sports facilities therefore is difficult.

4. Developing Sport Space and Facilities

a. If sport in an urban environment is considered important, it is essential to take sport fully in the development phase. Integration after construction of a neighbourhood is often financially and spatially impossible.

b. Intensive collaboration between the designers and the public space of the city department is necessary.

c. At the same time there is stagnation in the implementation of the construction. The smart combination with allotments next to the gym makes combined use possible; children are sporting while parents harvest vegetables."

-Daniel Casas Valle, *Sport in the City*

DANIEL CASAS VALLE

Design Guidelines:

Takeaways:

1. Understand sport is representation, and inclusivity in the landscape.
2. Parking lots are your friend when your planning and designing for sport.
3. When there is no public park space, make public park space. The streets are your friend too.
4. Proper attention to detail is important. specifically lighting and accessibility can make a space feel safe for one and not another if brushed over.
5. Consider time of day, month, and year, and how your design can support grandma on a walk, a kiddo skating home from school, and event hosting for sporting events and street-shut down.
6. Support the athlete as a designer, and respect their void, even if that means you do a little less.
7. Daniel is right, mix as much as possible. Communities, uses, etc. you have a special opportunity as a Landscape Architect to bring people together.
8. Plan for heavy use, which means flexibility, long term wear-and-tear, and the impacts of climate change

"FINALLY, THE GREATEST CHALLENGE LIES IN BRINGING TOGETHER THE WORLDS OF SPORT AND SPACE, AS PART OF THE MULTIFUNCTIONAL CITY. IF THIS IS DONE BY MUTUAL RESPECT AND A HEALTHY PORTION OF CHALLENGE, IT CAN GIVE A POSITIVE BOOST FOR BOTH THE SPORT AND FOR THE CITY"

-Daniel Casas Valle, Sport in the City

Special thanks to Hannah Chapin, Celia Hensey, Skylar Holloway, Ignacio Lopez Buson, Amoreena Miller, Rob Ribe, Philip Speranza, Kory Russel, Mary Polites, Cameron McCarthy LAP, my Webfoot family, my BCN Urban design group, and our MLA-BLA entire cohort and staff at UO for being such a supportive body these past 3 years.

and my Mom, Dad, Grandparents, Mackey, Zane and Alexa for always asking if I'm sleeping even when they know the answer.

1. Friedman, Michael T., and Jacob Bustad, 'Sport and Urbanization', in Robert Edelman, and Wayne Wilson (eds), The Oxford Handbook of Sports History, Oxford Handbooks (2017; online edn, Oxford Academic, 10 May 2017), https://doi.org/10.1093/oxfordhb/9780199858910.013.3, accessed 16 June 2023.

2. Santiago, J., & Sola, M. (2019). Superilla Sant Antoni. ESCOFET. https://www.escofet.com/en/projects/streetscape/superilla-sant-antoni

3. Dumpelmann, S. (2022). Landscapes for sport: Histories of physical exercise, sport, and health. Dumbarton Oaks Research Library and Collection.

4. Louv, R. (2008). Last child in the Woods. Algonquin Books.

5. Vamplew, W. (2022). Sports economics for non-economists. Routledge Taylor & Francis Group.

6. Miles, E. (2022). Nature is a human right: Why we're fighting for green in a Grey World. Penguin Random House.

7. Person, Luis, J., & Paramio-Salcines. (2013, July 24). Sport and urban regeneration: 26: Routledge Handbook of Sport Policy. Taylor & Francis. https://www.taylorfrancis.com/chapters/edit/10.4324/9780203807217-26/sport-urban-regeneration-juan-luis-paramio-salcines

8. Kompier, V., & Valle, D. C. (2015, March 19). Sport in the city - A new design and planning tool for sport facilities and outdoor space in urban environments - Amsterdam, Berlin, Copenhagen, Porto, Valencia. Academia.edu. https://www.academia.edu/10338266/Sport_in_the_City_a_new_design_and_planning_tool_for_sport_facilities_and_outdoor_space_in_urban_environments_Amsterdam_Berlin_Copenhagen_Porto_Valencia

9. Dickson, G., & Zhang, J. J. (2020, December 7). Sports and urban development: An introduction. International Journal of Sports Marketing and Sponsorship. https://www.emerald.com/insight/content/doi/10.1108/IJSMS-11-2020-0194/full/html

10. Kleen, B. (2022, June 14). How U.S. sports facilities can better serve cities. Global Sport Matters. https://globalsportmatters.com/research/2022/06/14/how-american-sports-facilities-can-better-serve-communities/

11. Kleen, B. (2022, June 14). How U.S. sports facilities can better serve cities. Global Sport Matters. https://globalsportmatters.com/research/2022/06/14/how-american-sports-facilities-can-better-serve-communities/

12. Council, B. C. (2022, October 17). The new urban mobility plan puts pedestrians at the centre. The new urban mobility plan puts pedestrians at the centre | Info Barcelona | Barcelona City Council. https://www.barcelona.cat/infobarcelona/en/tema/mobility-and-transport/the-new-urban-mobility-plan-takes-on-board-84-of-demands-and-suggestions-put-forward-2_1218221.html

SOURCES

Delaney Hopen

Masters In Landscape Architecture, UO 2023

Bachelors in Geological Sciences, Minor in Landscape Architecture, UI 2020

Delaney Hopen

Beach Volleyball (little), UO 2020-2021

Outside Hitter/Defensive Specialist/Libero, UI 2016-2020

Coach 2013-Present

REGENERATIVE *SPORT* URBANISM