Appendix A

Sources and Methods

Executive Summary:

The 2018 MAPSCorps Community Asset Report aggregates and summarizes MAPSCorps asset data in order demonstrate its value and to inform stakeholders at all levels of the unique strengths of the communities mapped by MAPSCorps youth. Asset numbers were normalized by population and by square mileage of Chicago communities areas in order to allow for comparison across communities (e.g. assets per 1000 people and assets per square mile). Additional data from the American Community Survey was incorporated for context. The report is organized into 7 pages:

1) Definitions
2) Asset distribution by Chicago community area (map)
3) Most common asset types citywide in 2018 (bar chart)
4) Asset change over time by communities (line graph)
5) Asset change over time by Asset Theme (line graph)
6) Relationship between number of assets and Community Area median income (scatter plot)
7) Comparing assets across communities (map selector + bar graph)

After developing the pages, the visualizations were iterated for maximum usability, face validity, and clarity with test users at the Lindau Lab at the University of Chicago, Chicago Department of Public Health, and Mathematica.

Sources:

Community Area Boundaries were sourced from City of Chicago open data portal at data.cityofchicago.com.

Population and Income Data

- Both population and household income data for this report are originally sourced from the US Census' American Community Survey 5-Year Estimates. For a given year, these data reflect an estimate derived from data collected that year and the previous four years, e.g. 2012's numbers come from estimates derived from 2008-2012. ACS 5-Year Estimates used in this report: 2012, 2013, 2014, 2015 and 2016 5-Year Estimates.
- This report summarizes MAPSCorps asset data by Chicago community areas. Chicago demographer Rob Paral aggregated ACS 5-Year Estimate data for Chicago community areas, and his aggregations of these data were sourced for this report. View and download Paral's datasets [here](#).

  Note: for both income and population data, 2017 MAPSCorps asset data is compared against 2016 ACS 5-Year Estimate, as the 2017 5-Year estimate is not yet available aggregated by Chicago Community Area.

Methods:

Aggregating MAPSCorps Asset Data

- By Type
    - For each year Chicago communities were mapped, Pivot Tables were created in Excel from the raw dataset of Active Places in the given year, which resulted in counts of how many assets of each type existed in a given community.
    - See Appendix B (beginning on page 3) for full definitions of all types and subtypes.
- By Theme
    - Similar Pivot Tables to the ones described above served as a starting point for Theme pivot tables, but Themes aggregate MAPSCorps data by sets of subtypes, rather than types.
    - See Appendix C (beginning on page 13) for full definitions of and process of creating Asset Themes.

The counts resulting from the above processes were combined into a template, along with the Population and Income data from the American Community Survey aggregated by Rob Paral. This template serves as the source for the data visualizations found in the Tableau report.

Taxonomy of Types of Places

Coding establishments as a single type of place

This is a list of codes for applying a single category to each establishment. These codes are for types of PLACES, not for covering all programs or services related to an establishment. The codes are organized into families of related categories, with two levels – type and subtype.   Each main type contains several subtypes, including at least one "other" category. There are a total of 16 main types:

1. Dining – Primarily sell or serve prepared food to the public
2. Retail – Primarily sell things to the public. Includes assets such as grocery stores, department stores, beauty shops, and more.
3. Trade services – Primarily sell services to the public related to a specific trade. Includes assets such as auto mechanics, bike shops, equipment rental, funeral homes, security services, computer repair, and more.
4. Personal services – Primarily sell services to the public related to the body
5. FIRE – Primarily provide Financial, Insurance, Real Estate, Legal and Professional Services to the public. Includes such as banks, currency exchanges, lawyers offices, and more.
6. Health services – Primarily provide health services or services directly related to health
7. Social service and political advocacy – Primarily provide social support, organizing or charitable services to individuals or the community
8. Wholesale, storage and transit – Places primarily intended for wholesale, or provide services related to storage space or transit
9. Industrial – Primarily manufacturing
10. Non-residential religious – Places devoted primarily to religious or spiritual pursuits
11. Childcare and school— Primarily provide educational and/or childcare for children, youth and students. Includes such assets as daycare centers and public and private elementary schools, high schools and universities.
12. Programmed residential – Places designed for short-term living or special populations. Includes assets such as parsonages, group homes, student dorms.
13. Public services – Primarily government or utility.
14. Arts and Entertainment – Primarily provides creative spaces and services to the public. Includes assets such as museums, zoos, night clubs, and more.
15. Fitness – Primarily provides spaces for working out or physical activity. Includes assets such as gyms, personal training centers and weight loss centers.
16. Other
    Includes the following subcategories: community event spaces, community gardens, research groups, and other (no subcategory).

1. Dining Establishments Codes	
1.01 Dining - Fast Food	Carry out - Cafeteria - Fast Food - no wait staff
1.02 Dining - Restaurant	Wait staff (as opposed to fast food)
1.03 Dining – Bar-grill	Bar with menu, a place you could go for lunch or dinner (but primarily a bar, not a bar inside a restaurant). Note: Bar/lounge/club listed under Arts/leisure
1.04 Dining – Café-Bakery-Specialty	Bakery, coffee -cafe, ice-cream or specialty food
1.05 Dining -Other specify	NOT catering – this is listed under Arts/leisure

2. Retail Establishments Subtype Codes (places that primarily sell things to the public)

2.01 Retail - Convenience	Focus on snacks and ready-to-eat packaged food, not raw ingredients for cooking, not much produce or meat if any
2.02 Retail - Large grocery	Large enough to have departments - meat, produce, etc
2.03 Retail – Small grocery	No departments, but focus is on food bought for home preparation (i.e. Aldi, Trader Joes, etc).
2.04 Retail - Other food	For preparation, not restaurants, for example a butcher
2.05 Retail - Drug	Pharmacies, medical supply stores, and chain drug stores such as Walgreens, CVS
2.06 Retail - Liquor	Package store, liquor store, wine shop
2.07 Retail - Clothing	All apparel except shoe stores - includes outerwear such as coats, and specialty wear such as uniforms or bridal gowns
2.08 Retail - Shoes	Includes all footwear such as boots, shoes, etc.
2.09 Retail - Resale	Thrift/consignment- 2nd hand sales except auto
2.10 Retail - Department store	Kohls, Target, Macy's, -- has different departments with different merchandise
2.11 Retail - Small mixed	Food-clothing-merchandise mix but smaller than dept store, Dollar Store for example
2.12 Retail – Housewares & furnishings	Housewares, light fixtures, kitchen, bath, bed, furniture, purchase or rental
2.13 Retail – Hardware-Garden	Home improvement or tools, building supplies, garden shop or nursery
2.14 Retail - Beauty-Accessory	Jewelry, handbags, accessories, wigs, beauty supplies
2.15 Retail - Phones	Cell phone stores
2.16 Retail - Electronics & Appliances	Radio Shack, Best Buy, computers, kitchen appliances
2.17 Retail – Car-truck-motorcycle	New or used motorized vehicles: car, truck or motorcycle; RV or motor homes included
2.18 Retail - Auto Supply	Parts, tires and other materials for sale, not installed
2.19 Retail - Gas station	Includes gas stations with attached car washes, mini-marts, towing and garage services
2.20 Retail - Office supplies	Office Depot, Staples, or other office supply store
2.21 Retail - Bookstore	Bookstore, news/magazine stand, comics, print media for sale
2.22 Retail - Gift-art-ethnic	Card/gift shop, African-themed goods/ethnic goods, art galleries
2.23 Retail - Pets	Pet stores, pet supplies, sales related to pets, not services
2.24 Retail – Crafts	Art/craft supplies, framing, fabric, hobby shop supplies

2.25 Retail - Toys	Children's toys, video games
2.26 Retail - Other specify	

3. Trade Service Establishments Subtype Codes (Places that primarily sell services)	
3.01 Trade Service - Vehicle services	Auto, truck or motorcycle repair, wash, detailing
3.02 Trade Service - Building trade	Plumbing, electrical, contractor, heat & cool, painting, roofing, handyman, welder, woodworking, mason, etc.
3.03 Trade Service - Other repair	Non-auto, non-building – for example repair of shoes, sewing machines, vacuums
3.04 Trade Service - Outdoor service	Lawn care, landscaping, or tree removal service
3.05 Trade Service - Indoor service	Cleaning, pest control, janitorial
3.06 Trade Service - Security	Locksmith, security personnel or private police,
3.07 Trade Service - Florist	Flower arrangements and delivery
3.08 Trade Service - Funeral	Funeral home, crematorium or cemetery service
3.09 Trade Service - Disposal	Waste removal service and recycling services
3.10 Trade Service - Equipment rental	Any rental of equipment but not car-van-truck
3.11 Trade Service - Bike shops	Bicycle sales, repair or rental, new or used
3.12 Trade Service - Copy, mail and print shops	Except public post office, mailboxes, copy/printing shop and/or retail shipping, Kinkos Fed Ex, Minuteman Printing, Mailboxes, Etc.
3.13 Trade Service - Tech service	IT, computer repair, web design, software developers, hardware and software services related to computers and the internet (not primarily sales of equipment)
3.14 Trade Service - Media	TV, Radio, Newspaper offices, Book publishing, Film making
3.15 Trade Service - Photo studio	
3.16 Trade Service - Animal care	Veterinarian, animal hospital, animal shelter, animal grooming, dog-walking, boarding services, etc.
3.17 Trade Service - Other specify	

4. Personal Service Establishment Subtype Codes	
4.01 Personal Service - Beauty	Barber or hair salon, tanning parlor
4.02 Personal Service - Body art	Tattoos and body piercing
4.03 Personal Service - Massage	Commercial personal massage
4.04 Personal Service - Psychic	Tarot card reader, palm readers, psychics and the
4.05 Personal Service - Laundry, tailor	Public laundry or dry cleaners, alterations, sewing
4.06 Personal Service - Other specify	

5. Financial, Insurance, Real Estate, Legal and Professional Services Establishment Subtype Codes	
5.01 FIRE - Bank	Bank or credit union
5.02 FIRE - Accountant	Including tax office such as H&R Block, private CPA, etc.
5.03 FIRE - Currency exchange	
5.04 FIRE - Payday loan	Fast Cash, Speedy Cash, Check 'n Go, Allied Cash
5.05 FIRE - Pawn shop	
5.06 FIRE - Other financial specify	Mortgage, loan (not payday), credit, Money transfer, Western Union
5.07 FIRE - Insurance Agency	
5.08 FIRE - Lawyer's Office	
5.09 FIRE - Other legal specify	Notary public, bail bondsman
5.10 FIRE – Property Service Office	Realtor/mortgage broker/property management
5.11 FIRE - Corporate Office	
5.12 FIRE - Other professional specify	Architect, other non-medical professions
5.13 FIRE - Other specify	

6. Health Services Establishments Subtype Codes

6.01 Health Service - Hospital	Inpatient care except mental hospitals
6.02 Health Service - ER	Emergency room or trauma center
6.03 Health Service - Out-patient	Clinic or doctor's office
6.04 Health Service - Chiropractor	
6.05 Health Service - Alt. Medicine	Acupuncture/herbalist or other alternative
6.06 Health Service - Dentist	Dentists, oral surgeons, orthodontists
6.07 Health Service - Eye	Optometrist/eye glasses
6.08 Health Service - Mental Hospital	Mental health in-patient
6.09 Health Service - Counselor	Counselor, psychiatrist, other mental health out-patient
6.10 Health Service - Therapy outpatient	Rehab/therapy/testing **out-patient** clinic
6.11 Health Service - Rehab inpatient	Rehab/therapy **in-patient** (separate from a shelter)
6.12 Health Service - Ambulance	medical transport services
6.13 Health Service - Mobile health service	Staging area for mobile health services
6.14 Health Service - Other specify	

7. Social Services and Political Advocacy Subtype Codes

7.01 Soc Serv & Polit Advoc - Soc. Service Cntr.	Community centers/settlement houses/neighborhood centers
7.02 Soc Serv & Polit Advoc - Food Charity	Food pantry - soup kitchen or other food
7.03 Soc Serv & Polit Advoc - Employment	Employment training or placement center
7.04 Soc Serv & Polit Advoc - Child welfare	adoption, foster care services, DCFS - not residential
7.05 Soc Serv & Polit Advoc - Senior	service center for the elderly - not residential
7.06 Soc Serv & Polit Advoc - Disabled	Service center for disabled persons - not residential
7.07 Soc Serv & Polit Advoc - Mobile Service	Staging area for mobile social services such as meals on wheels
7.08 Soc Serv & Polit Advoc - Other soc.	Other social services
7.09 Soc Serv & Polit Advoc - Administrative	Offices for social service programs -no services delivered from this location

7.10 Soc Serv & Polit Advoc - Political party	Office of Democrats, Republicans or other political party
7.11 Soc Serv & Polit Advoc - Advocacy	Community organizer or political action or advocacy group - Rainbow Push, NAACP, chambers
7.12 Soc Serv & Polit Advoc - Other specify	Other political advocacy

8. Wholesale, Storage and Transit Subtype Codes	
8.01 Whlsl, Stor & Transit - Warehouse	Includes private or government storage facility
8.02 Whlsl, Stor & Transit - Public storage	Rental storage space for individuals
8.03 Whlsl, Stor & Transit - Taxi, limo and	Taxi, limousine, livery, charter, etc.
8.04 Whlsl, Stor & Transit - Public transit	terminal or stop for people transport
8.05 Whlsl, Stor & Transit - Goods distribution	Goods transport terminal, goods shipping or delivery facility, UPS, Peapod, etc.
8.06 Whlsl, Stor & Transit - Parking	Parking garage or surface lot
8.07 Whlsl, Stor & Transit - Vehicle rental	Car, truck, van or trailer rental
8.08 Whlsl, Stor & Transit - Vehicle emissions test station	Test station
8.09 Whlsl, Stor & Transit - Moving & storage	Movers or storage providers
8.10 Whlsl, Stor & Transit - Towing	Car, truck or other vehicle towing and tow-boats/tug boats
8.11 Whlsl, Stor & Transit - Wholesalers	Business-to-business sales of materials or goods
8.12 Whlsl, Stor & Transit - Other, specify	

9. Industrial Subtype Codes	
9.01 Industrial - Food processing	Food processing plant
9.02 Industrial - Chemical	Chemical production/processing
9.03 Industrial - Parts	Parts production or machining
9.04 Industrial - Finished goods	Production of final products
9.05 Industrial - Other specify	

10. Non-Residential Religious Subtype Codes

10.01 Church	Church or Christian house of worship
10.02 Mosque	Muslim house of worship
10.03 Synagogue	Jewish house of worship (synagogue, temple)
10.04 Other worship	Other house of worship (non-Christian, non-Jewish, non-Muslim, or interreligious)
10.05 Other Religious	Christian Science Reading Room, Nation of Islam, denominational offices, etc.

11. Childcare and School Subtype Codes

11.01 School & Childcare - Home daycare	Licensed home daycare - if not advertised
11.02 School & Childcare - Kid center	Center-based childcare
11.03 School & Childcare – Public school K-12	Public school up to 12th grade
11.04 School & Childcare - Private school K-12	Private school up to 12th grade
11.05 School & Childcare -Trade school	HS degree or less pre-requisite
11.06 School & Childcare -Professional school	AA degree or higher pre-requisite
11.07 School & Childcare -Seminary	Theological school
11.08 School & Childcare -Public university	public college or university
11.09 School & Childcare -Private university	private college or University
11.10 School & Childcare -Other specify	Tutoring center, family learning center, literacy center

12. Programmed Residential Subtype Codes

12.01 Programmed Residential - Hotel	Hotel, Motel, SRO, Hostel, Bed & Breakfast
12.02 Programmed Residential - Shelter	Half-way houses or other transitional shelters for those with no other home
12.03 Programmed Residential - Group home	for disabled, mentally impaired, orphanage, foster group home
12.04 Programmed Residential – Senior housing	Retirement/nursing home/senior housing
12.05 Programmed Residential – Religious residence	Housing for religious figures - Rectory, nunnery, priory, manse, convent, monastery
12.06 Programmed Residential - Public	CHA or publicly subsidized housing
12.07 Programmed Residential - Dorms	School dormitories
12.08 Programmed Residential - Other specify	

13. Public Services Subtype Codes	
13.01 Public Services - Post office	
13.02 Public Services –City Fire Station	Chicago Fire Dept. Station with trucks and
13.03 Public Services -Library	Including private libraries, such as Regenstein
13.04 Public Services -City Police Station	Chicago Police Dept. Station public comes into - not admin offices
13.05 Public Services -Other law enforcement specify	County, State, ATF, FBI, DEA
13.06 Public Services -Government	(Except social services) Government
13.07 Public Services -Representative	Office of an elected official
13.08 Public Services -Utility-water	Water-related utility facility
13.09 Public Services -Utility-electric	Electric-related utility facility
13.10 Public Services -Utility-gas	Gas-related utility facility
13.11 Public Services - Military	Military recruitment stations, military bases, military storage or facility (including National Guard)
13.12 Public Services -Other specify	

14. Arts and Entertainment Subtype Codes	
14.01 Arts & Entertainment - Museum	Museum, historic home open for viewing
14.02 Arts & Entertainment - Live animals	Zoo or aquarium
14.03 Arts & Entertainment – Live theater	(Except movie cinema) Performing arts center, live theater venue
14.04 Arts & Entertainment – Cinema	movie theaters
14.05 Arts & Entertainment – Hall-party-cater	Dance hall/rental hall, party or event planning, caterer, set up for events or parties (rental tables and chairs, dinnerware, linens, etc. for party set ups)
14.06 Arts & Entertainment – Club-lounge-bar	Lounge, night club, comedy club or a bar without a sit-down restaurant area or a food menu for full meals
14.07 Arts & Entertainment – Social club	e.g. yacht club, fraternal organization, country club, block club, enthusiasts club
14.08 Arts & Entertainment – Performers & arts instructors	Performer/performing group: orchestra, ensemble, band, choir, singer, musician, dancer, artist, actor, etc. Also includes arts, music, or classes
14.09 Arts & Entertainment – Amusement	Pool hall, gaming, pinball, arcades, amusement parks, bowling alleys, roller or skating rinks, mini-golf, batting cages, go-karts.
14.10 Arts & Entertainment –Video rental	Video or DVD rental (movies, games)
14.11 Arts & Entertainment – Stadium, arena or sport venue	Stadium, arena or other spectator sports location
14.12 Arts & Entertainment - Golf	Golf course, golf club house
14.13 Arts & Entertainment - Travel	Travel agent
14.14 Arts & Entertainment - Other specify	

15. Physical fitness Subtype Codes

15.01 Fitness – Fitness art	Martial arts - yoga - dance – Pilates, horseback riding, or other fitness instruction center
15.02 Fitness – Gym	gymnasium, swimming pool, field house, athletic facility, weight room, exercise room
15.03 Fitness – Trainer	Personal trainer
15.04 Fitness – Sport team	Organized sport league or team
15.05 Fitness – Weight loss	Weight-loss center
15.06 Fitness – Other [Specify]	

16. Other Subtype Codes

16.01 Other – Community event	Community event group - group that sponsors or plans a regular local, public event such as an art fair, parade, street fair, music festival, book fair, etc.
16.02 Other - Community garden	Includes vacant lots converted to parkland or
16.03 Other - Research group	Research organization
16.04 Other - Other Specify	

When multiple functions are present, the primary function was coded, not each program or service. To select the proper code, youth were instructed to think about the establishment's primary function, not necessarily all of the goods or services provided by it. When a service or a program is provided by an establishment within its space, the establishment was coded as the type of place that is providing services and programs, not as the type of smaller services and programs. For example, there is a code for a stand-alone food pantry (7.02), but many food pantries are not stand-alone establishments. Instead, they are often programs that are run by a church or other community group within that establishment's space. If the food pantry is a program offered by a church, only the church would be listed as an establishment, and it would be coded as a church (10.01).

Specialized locations were coded for their specific functions
If an establishment had multiple locations dedicated to different functions, each place would be coded for its own primary function, not necessarily the industry or end product that the place supports.

For example, a corporate office for a fast food company or a chain of grocery stores would be coded as a corporate office (5.11), just the same as a corporate office for an electronics store or a clothing store chain. A place where the food is actually made or packaged would be coded as Industrial - Food Processing (9.01). A place that stores and distributes food for food pantries, such as the Greater Chicago Food Depository, would be categorized under Wholesale, Storage & Transit - Goods Distribution (8.05). If a person went there, they would expect to see a large warehouse with stacks of food products, trucks and distribution management workers.

When in doubt about the type, youth were instructed to think of it from the point of view of a potential customer. If they were looking for it in the yellow pages, what category would it most likely be under? What will people expect to be there if you put it under that category? If they couldn't figure it out, youth would ask a store owner or manager how to best categorize the business.

Appendix C

How Youth Analysts Coded the Asset Themes

Asset Themes

- 📍 "Asset Themes" group businesses and organizations into groups that emphasize community strengths:

  HEALTH   **PEACE**   **YOUTH WELL-BEING & JOBS**

- 📍 Youth classified businesses and organizations into three theme groups.
- 📍 Youth classified some businesses and organizations into more than one theme group.
- 📍 Theme groups represent how youth see the assets of Chicago communities.

HEALTH

Includes assets that contribute or have the potential to contribute to the social, emotional, psychological and physical health of a community.

Youth deliberated these questions to determine if a business or organization would be classified as a **HEALTH asset**.

- Does this type of asset keep residents healthy?
- Does this type of asset help residents who are feeling bad to feel better?
- Does this type of asset encourage exercise or healthy behavior?

Youth classified these types of places into the HEALTH theme

- 📍 Health Services - Ambulance, chiropractor, counselor, dentist, emergency room, eye care, hospital, medicine-alternative, mental health hospital, outpatient therapy, outpatient care, rehab, mobile health service
- 📍 Housing - Senior housing, shelter; Other - community garden, community event group
- 📍 Physical Fitness - Fitness art, gym, other fitness, other health, sport team, trainer, weight loss
- 📍 Social Services - Child welfare, disabled services, employment, food charity, senior services, other social service
- 📍 Retail - Drug, housewares & furnishings, large grocery, other food, pets, small grocery

PEACE

Includes assets that contribute or have the potential to contribute to anti-violence, keeping individuals and residents safe, bringing residents together, and engaging in positive experiences.

Youth deliberated these questions to determine if a business or organization would be classified as a **PEACE asset**.

- Does this type of asset keep residents safe or help them feel safer?
- Does this asset encourage residents to talk or interact with their neighbors?
- Does this type of asset help individuals stay motivated for a positive future?

Youth classified these types of places into the PEACE theme

- 📍   Arts and Entertainment - Travel
- 📍   Childcare and Schools - Kid center, seminary
- 📍   Fitness - Sport team
- 📍   Health Services - Counselor, inpatient rehab, mobile health service, out-patient clinic, therapy outpatient
- 📍   Other - Community garden, community event group; Personal Services - Beauty
- 📍   Political - Advocacy
- 📍   Public Services - City police station, city fire station, library, military other law enforcement
- 📍   Religious - Church, mosque, other religious, other worship, synagogue
- 📍   Residential - Group home, religious residence, shelter
- 📍   Retail - Beauty-accessory, bookstore, clothing, convenience store, crafts department store, gas station, gift-art-ethnic, other food, shoes, small mixed store, pets, resale
- 📍   Social Services - Child welfare, disabled services, employment, food charity, other social service, senior services, social service center

YOUTH WELL-BEING & JOBS

Includes assets that help youth to build positive friendships, live healthy lives and improve their future.

Youth deliberated these questions to determine if a business or organization would be classified as a **WELL-BEING & JOBS asset**.

- Does this type of asset provide support for youth?
- Does this type of asset provide jobs for youth?
- Does this type of asset help youth stay healthy?

Youth classified these types of places into the **YOUTH WELL-BEING & JOBS theme**

- Arts and Entertainment - Social club

- Childcare and School - Home daycare, other school private school K-12, public school K-12, private university, public university, seminary trade school

- Financial - Bank

- Personal Services - Beauty services

- Dining - Café-bakery-specialty, fast food, restaurant

- Residential - Dorms, group home, shelter

- Public Services - Library

- Retail - Beauty-accessory, bookstore, clothing convenience, department store, electronics & appliances, phones, pets, resale shoes, small mixed retail toys