

THE PLANNING POST



FEATURED TOPIC:

How Cellphone and Fitness App Data is Helping Create Equity in Public Parks

The attached article from the American Planning Magazine discusses the Los Angeles County Department of Parks and Recreation (DPR) who recently began to use data from fitness trackers and smartphone apps, among many other data sources, to help examine and reimagine park restoration and conservation through an equity lens.

UPCOMING MEETINGS:

County PC:
April 10th @ 8:30 am

City PC:
April 10th @ 4:00 pm

County BZA:
April 22nd @ 7:00 pm

City BZA:
April 23rd @ 6:30 pm

City of Columbus February Plan Commission Results

ANX-2024-001: Columbus Right-of-Way Annexation – Favorable Recommendation

A resolution forwarding the proposed annexation of right-of-way at multiple locations into the Columbus Corporate Limits.

MP-2023-005: BB Jones Addition Replat – Approved

A request by Blackburn Properties, LLC to create 1 new lot, for a total of 2 lots over +/- 0.17 acres. The property is located at 62 South Beatty Street, in the City of Columbus.

ANX-2024-002: JOLI Development – No Recommendation

A request by JOLI Development to annex 289.44 acres into the Columbus Corporate Limits. The properties are located on the north and south sides of State Street / State Road 46, generally between Fairview Drive and 250 East, in Columbus Township.

ANX-2024-003: Toyota Material Handling – Favorable Recommendation

A request by Toyota Material Handling to annex 70.53 acres into the Columbus Corporate Limits. The properties are located on the east side of I-65/225 West between Deaver Road and 300 South, in Wayne Township.

RZ-2024-001: Toyota Material Handling – Favorable Recommendation

A request by Toyota Material Handling to rezone 65.03 acres from AP (Agriculture: Preferred) to I-2 (Industrial: General). The properties are located on the east side of I-65/225 West, between Deaver Road and 300 South, in Wayne Township.

RZ-2024-002: HMGO Real Estate – Favorable Recommendation

A request by HMGO Real Estate to rezone 15,795 square feet from RS2 (Residential: Single Family 2) to RT (Residential: Two-Family). The property is located at 3983 North 150 West, in Columbus Township.

Bartholomew County February Plan Commission Results

No meeting due to a lack of agenda items.

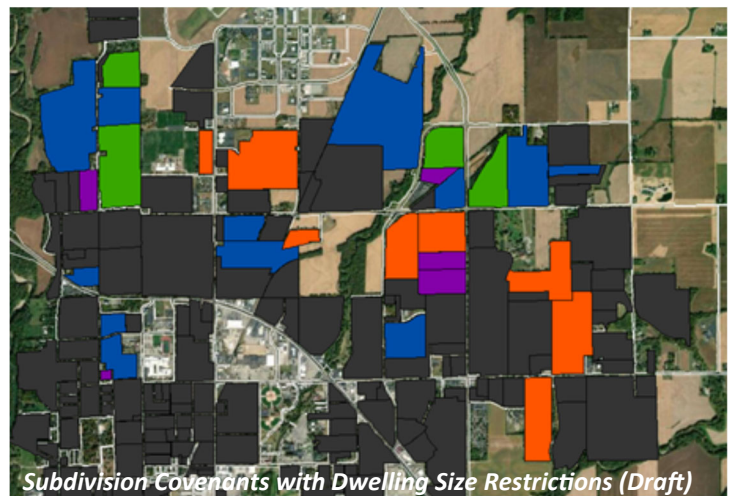
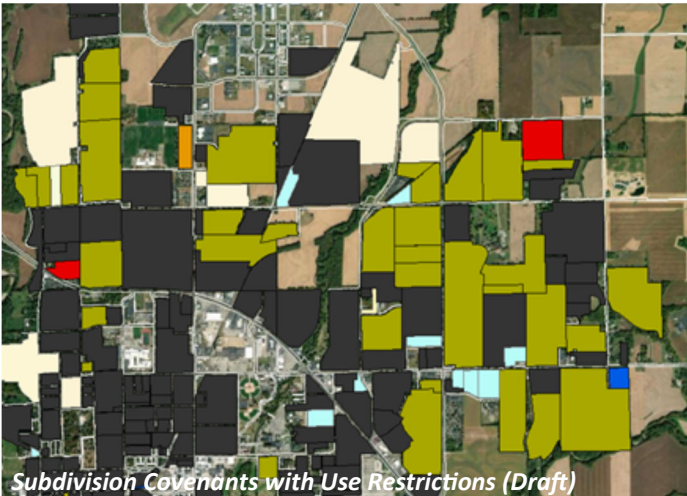
JOKE OF THE MONTH: Q: What type of bow cannot be tied? A: A rainbow.



PLANNING DEPARTMENT REPORTS:

Long Range Planning

The Planning Department has been researching and mapping subdivisions with Covenants, Conditions, and Restrictions that affect the minimum dwelling size and use of property, adding a layer of private regulation in addition to the City’s zoning regulations. The intent of this mapping exercise is to determine areas of the city that have added barriers via these restrictions to the development and redevelopment of different, potentially “missing middle” housing types. In addition to the mapping exercise, the Planning Department has been analyzing building permit data from the last 10 years to best document what has been built, who has built it, and how that property is zoned to get a better picture of how the zoning ordinance plays into what types of housing are built in the city.



Year	City of Columbus				
	New Single Family Residential	New Two family	Building Addition	Likely ADU	Modular/Mobile Home
2013	200	4	24	2	1
2014	224	2	16	0	1
2015	205	4	12	0	1
2016	175	8	19	3	1
2017	146	0	14	0	1
2018	100	6	15	1	0
2019	114	2	17	2	1
2020	108	0	18	1	1
2021 *	166	0	17	1	0
2022	97	8	13	0	0
2023	115	0	9	0	2
2024	2	0	1	0	0
Total	1652	34	175	10	9

2021 Single family includes 15 townhomes

Transportation Planning

The City Engineer’s Office reports that work has started on the Columbus section of the Lowell Road project, which will make improvements between US 31 and 325 West. The City’s section is between US 31 and 200 West. The relocation of utilities is taking place currently, and will soon be complete. Construction will likely begin in April. Roadway improvements are expected to take approximately 90 days to complete. After the 90 day period, the road will be open while other parts of the project are completed. This will include such infrastructure as sidewalks and curbs. The City’s section of the Lowell Road project will eventually connect to the County’s section (from 200 West to 325 West), which is programmed to start in 2027.

The Lowell Road improvement project is sponsored by the MPO, with the federal funding it manages providing up to 80 percent of project costs. The MPO receives an annual allocation of federal funding to support transportation projects within Columbus and Bartholomew County. The City of Columbus and Bartholomew County apply for these funds through an annual Call for Projects. Projects are selected through a scoring process based on the adopted CAMPO Metropolitan or “Long-Range” Transportation Plan, a document which identifies transportation needs in the planning area, and is updated every five years.



Development Review

Jiffy Lube, located at the corner of National Road and 25th Street just underwent a small expansion and building renovation. The Zoning Compliance Certificate was approved on August 10, 2023. The addition was a single 708 square foot autobay, adding to the two existing oil change bays. In addition, prior to the Zoning Compliance Certificate approval, they received conditional use approval from the Board of Zoning Appeals, on March 14, 2023, to allow the expansion of an auto repair facility in the Wellfield Protection Overlay District.

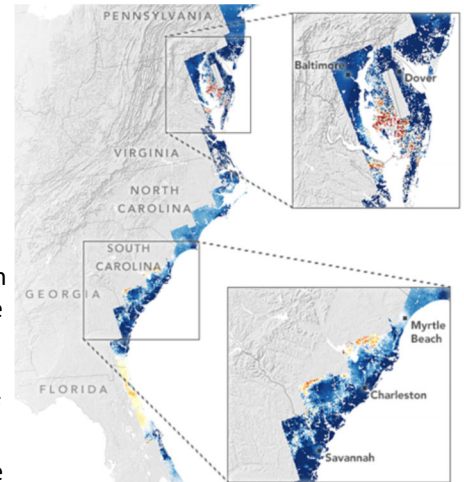
As a reminder, the purpose of the Wellfield Protection Overlay District is “to safeguard the public health, safety, and general welfare of those persons who rely on public and / or utility operated wellfields for clean, safe drinking water”. These regulations are intended to prevent land uses and certain development practices that commonly have the potential to degrade water quality by introducing chemicals, organic hazards, and other potential harmful elements into the ground water system within a 5-year time-of-travel area of the wellfields. This includes the introduction of hazardous materials into the area, the creation of hazardous byproducts from on-site activities, and the alteration of the land in a manner that increases the exposure of the ground water system to potential contaminants.



Floodplain Management

This month the Floodplain Manager attended a FEMA Hazard Mitigation Partners Workshop. The four-day virtual event offered daily themes on Equity, Partnerships, Capacity Building, and Hazard Mitigation/Floodplain Management Training.

One of the highlights was a session focused on mitigation strategies in a changing climate. Sometimes enforcing Federal Flood Insurance Rate Maps (FIRMs) based on modeling utilizing rainfall and topographic data that is decades old can be a challenge. Average sea levels have increased over 8 inches since 1880, with three of the inches in the last 25 years (NOAA 12/2023). In addition to the average sea level increases, a recent study from NASA shared during the workshop shows that the land mass in major areas of the US (like in New York, North Carolina, Florida, etc.) are actually experiencing a 1-3 mm sinking of the land the cities are built on each year. Compounding both the sea level rises and the land mass sinking, the contiguous US has had an annual precipitation increase at a rate of 0.2 inches per decade since 1901. The Midwest and the Northeast of the US have experienced the most dramatic increases in heavy precipitation events. From 1958 to 2016, the Midwest experienced a 42% average increase in total precipitation falling in the heaviest 1% of events (EPA and NOAA 4/2021). Meaning that more precipitation is coming down annually and in the form of intense single-day events in recent decades.



Source: Sinking Land Annual Totals - NASA Earth Observatory Data. Oehenhen, Leonard O., et al. (2023)

In the US, roughly 40 percent of the population lives in relative high-population dense coastal areas where sea levels, rain fall totals, and land elevation plays a big role in flooding and storm hazards. More and more local governments and municipalities are working to update infrastructure and increase regulatory building standards to mitigate the increased flood risk due to climate changes. Some examples shared in the workshop include; a flood wall on the Mississippi River in Clarksville Missouri, a half mile stretch of Tiger Dams (bright orange flood barriers) in Hollywood, Florida, and a proposed \$107 million in a cost share mitigation program from Florida homeowners that allows property owners to elevate or flood proof older structures.

The City of Columbus and Bartholomew County have several regulatory building standards in the Flood Hazard Overlays (Chapter 4.7) portion of the zoning ordinance. These higher standards help mitigate risk in an ever changing environment were current modeling and data can often be hard to come by. Looking at modeling efforts, regulatory changes, and infrastructure improvements that other communities are successfully implementing, can help create ideas and guidance for our own upcoming Flood Risk Management Plan update and flood mitigation program planning efforts between now and the next 5-year FEMA review.



How Cellphone and Fitness App Data is Helping Create Equity in Public Parks

Park planners harness novel data sources and tools to direct equitable conservation, amenities, and access.



At Earvin “Magic” Johnson Recreation Area, youngsters can explore habitat restoration and biodiversity projects, which are among recent improvements. The park is situated in Willowbrook, an underserved area with a high level of park need, according to the 2016 Parks Needs Assessment. The PNA+ identified Willowbrook as a high priority area for regional recreation. Photo courtesy of MIG, Inc.

July 20, 2023 - By CLEMENT K.H. LAU, FAICP

In Los Angeles (LA) County, it's much easier to find a beautiful, tree-filled park with attractive amenities in Beverly Hills than in East LA or South LA. Home to 10 million residents, LA County has about 1 million acres of parkland — 38 percent of the county's total land area. But there are wide disparities in where these parks are located, how easy they are to get to, and what they offer their communities.

Luckily, there is plenty of data — including some from new and innovative sources — to help ensure that LA County's [park planning is equitable](#), today and tomorrow. The Los Angeles County Department of Parks and Recreation (DPR) recently began to use data from fitness trackers and smartphone apps, among many other data sources, to help examine and reimagine park restoration and conservation through an equity lens.

DPR's efforts align with the [global "30x30" initiative](#), which aims to conserve 30 percent of lands and coastal waters by 2030 to address climate change and protect biodiversity. LA County's 30x30 strategy reimagines conservation through an equity lens to include both the protection of natural lands and the restoration of degraded lands (such as decommissioned oil fields and landfills), especially in lower-income communities and communities of color. Restoration needs and environmental burdens are concentrated in these neighborhoods. In fact, people of color account for 84 percent of the 1.6 million LA residents living in priority areas for restoration.

Data, mapping, and analyses

In December 2022, the Parks Needs Assessment Plus ([PNA+](#)) was adopted by the Los Angeles County Board of Supervisors. PNA+, developed by DPR with consultants from MIG Inc., builds on a [2016 PNA](#). The report has already won two honors: an Award of Excellence for Resilience and Sustainability from the California Chapter of APA and an Award of Excellence in Innovation in Green Community Planning from the Los Angeles section of APA California.

The PNA+ final report presents data, maps, analyses, community input, and recommended actions in support of additional land conservation and restoration, transit to parks, and other strategies to meet local and regional recreation needs, especially in the most vulnerable communities.

Dimensions of Population Vulnerability

The PNA+ used data from the California Healthy Places Index® to identify areas of the county with vulnerabilities in four key categories. Strategies were then tailored to address the specific conditions that prevent residents from accessing parks and open spaces. Source: [PNA+ Final Report](#).

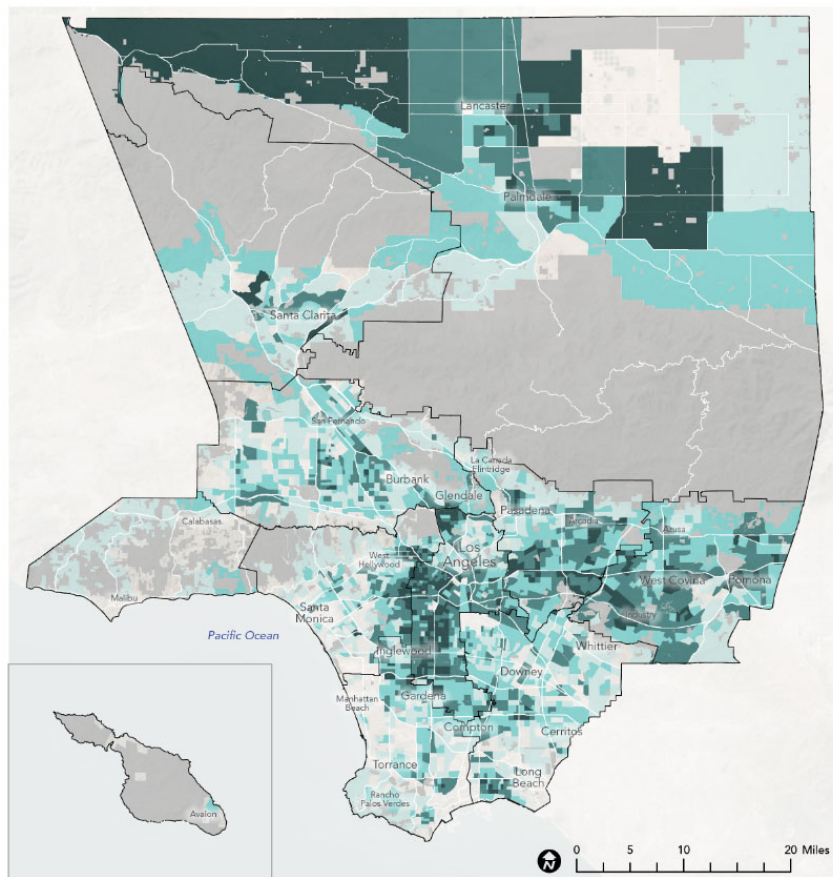


The PNA+ focuses on the most vulnerable residents: those living in park-poor and tree-poor communities across the county. Vulnerable areas are identified and mapped using GIS and data from California's [Healthy Places Index®](#) (HPI). The index addresses four dimensions that make residents particularly vulnerable to the effects of climate change: social barriers, transportation barriers, health vulnerability, and environmental vulnerability. The latter can include a high number of excessive heat days and limited tree canopy, or lack of "shade equity."

The PNA+ also identifies priority areas for conservation and restoration based on an analysis of where environmental benefits and burdens are concentrated. The planners used data from state and federal agencies such as the [California Department of Fish and Wildlife](#), [California Office of Environmental Health Hazard Assessment](#), and the [U.S. Geological Survey](#).

In addition, the PNA+ maps priority areas for regional and rural recreation based on population vulnerability, access to and availability of existing recreational facilities, and available amenities. Some communities face challenges in using these parks due to location, distribution, and other factors, including the lack of public transit service. In the most urban areas of the county, parklands account for less than five percent of lands. And while rural areas have significant acreage dedicated to parkland, they are lacking in certain amenities — such as shaded seating, play areas, and walking trails — needed for recreation and climate resiliency. This is especially true for water-based recreation facilities like swimming pools and splash pads.

After Identifying Vulnerabilities, Map Them



Maps helped planners see a spectrum of areas with moderate-to-high vulnerability for one dimension (light teal) to moderate-to-high vulnerability for all four dimensions (dark teal). The dimensions the PNA+ assesses are social barriers, transportation barriers, health vulnerabilities, and environmental vulnerabilities. On the map, gray represents regional parks and open spaces, as well as the Angeles National Forest and the Santa Monica Mountains. Source: PNA+ Final Report.

Data from fitness apps

To better understand park access, use, and visitorship, DPR acquired data collected from fitness apps and mobile phones.

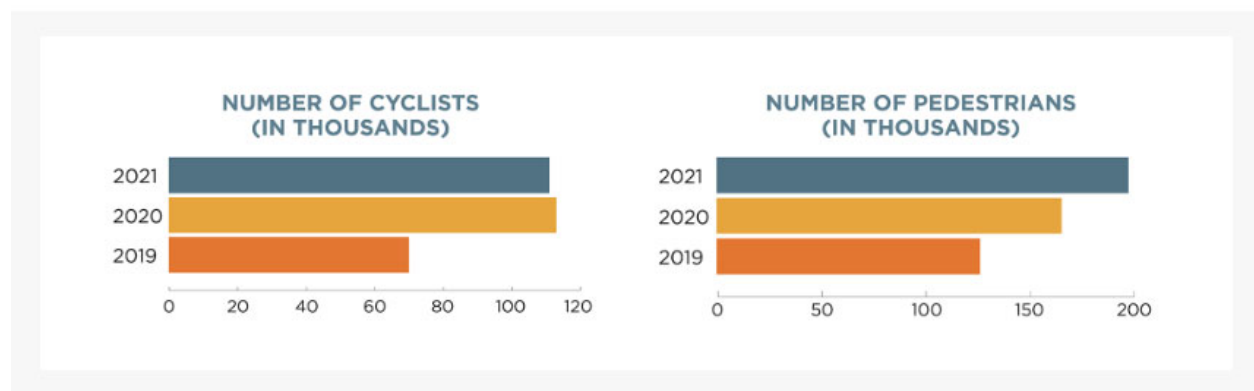
To learn more about the behaviors and movements of bicyclists and pedestrians (including walkers, runners, and hikers) at parks, the PNA+ analyzes free data from [Strava](#), a fitness tracking app. Trip data from Strava users is aggregated and deidentified according to industry standards and then provided at no cost to public agencies like DPR through the [Strava Metro](#) dashboard. In lieu of conducting labor- and time-intensive studies at individual park sites, planners and other decision makers are able to use this data about local mobility patterns to support the development and management of bicycle and pedestrian infrastructure.

To gain better insights about users outside of Strava, DPR also procured smartphone-generated data for 2019 and 2020 from [Unacast](#), a location data company. Using location data, the PNA+ offers detailed park visitorship profiles for about 40 regional-serving parks and recreational facilities across LA County, including a wide range of park types in diverse settings that offer a variety of recreational opportunities.

Mobility data from smartphones provides unprecedented insight into broad patterns of park use and allows park planners to identify and compare systemwide trends. However, there are some limitations associated with this method, including that data can only be gathered from the phones of adults 18 and older. For sites that attract large numbers of children on field trips, when they are not accompanied by their individual guardians, visitorship totals may be understated. Additionally, in areas with poor cellular coverage, some visits may not be reflected in the data.

Using Cellphone and Fitness Data in a New Way

By working with third-party technology companies, park planners were able to use anonymized data to understand park visitorship and trips by mode and over time, which helped determine where infrastructure improvements might be needed. Source PNA+ Final Report.



Virtual engagement tools

PNA+ outreach occurred during the COVID-19 pandemic, when in-person contact was limited, and most meetings were virtual. In addition to smartphone data, planners employed the latest digital tools to collect, analyze, and visualize community input.

Map-based Surveys: Online surveys collected public input on regional and rural park needs using a software called [Maptionnaire](#), which integrates survey questions with photos and interactive maps. Those interactive maps allowed respondents to pinpoint where they lived, which parks they used, which areas they thought needed more parks and recreational amenities, and more. Maptionnaire also enabled efficient collection, analysis, and visualization of map-based data, which planners downloaded in formats supported by GIS software.

Live Polling: To make online meetings more interactive and to gather instant public opinion, live polls were conducted using [Mentimeter](#). Polls are quick and easy to build with this tool, and responses from the audience appear in real time as dynamic visualizations. Mentimeter can also be used to create live word clouds that highlight the most popular responses to poll questions.

Live Notetaking: To show participants that their ideas and comments were immediately and properly captured, an ideation and visualization tool called [Mural](#) was used as a digital whiteboard with virtual sticky notes for ideas, suggestions, and feedback. DPR received positive feedback about the tool and how its accurate notetaking reflected attentiveness and understanding.

Nothing can replace the connections and opportunities for relationship building that in-person meetings and activities provide. However, there are tools that can help make virtual meetings more engaging, collaborative, and even fun. Also, online surveys can be much more relatable and visually appealing when interactive maps, photos, and graphics are included.

While there are limitations and costs associated with the use of technology and these data sources and tools, planning agencies should make the necessary investments. Planners must become more data driven and tech savvy to better understand and meet the needs of the communities we serve. In LA County, these tools have been essential to help meet the goals of improving park equity.

Clement Lau, FAICP, is a departmental facilities planner with the Los Angeles County Department of Parks and Recreation.