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Oakland is a community of almost 20,000 people across four city-designated areas: North, Central, South, and West Oakland.	6
Over two-thirds of Oakland's residents – 13,000 – are between 15-24 years old. They live in all neighborhoods of Oakland.	8
There are as many early career aged residents in Oakland as there are in Lawrenceville and the Southside Flats.	8
There are school-aged children in every neighborh of Oakland.	nood 8
Oakland has comparatively fewer residents age 5: than the city overall, but comparatively more resid over the age of 75.	
Oakland residents are highly-educated.	11
Oakland is a center of learning for over 44,000 undergraduate, graduate, and medical students.	12

Oakland also hosts approximately 2,000 pre-K- lifelong learning students over the course of th 12	
There are 7.121 households in Oakland.	19

Overall, more of Oakland's population identifies as Asian and/or white and less of Oakland's population identifies as Black than the city overall.

The population of residents who identify as Black has been declining across all Oakland neighborhoods. 21

There are students from over 100 countries studying in Oakland.

Oakland has a higher share of very low-income households than the city overall.

Compared to the City overall, Oakland has relatively few households headed by someone of prime working age (25-64 years old) and more low income households.

The racial breakdown of homeownership and rental tenure varies widely across Oakland neighborhoods. 27

Oakland has areas of concentrated homeownership, but it is primarily a rental market focused on a highturnover student population.

Most of the housing stock in Oakland is characterized as average to fair in condition.

While the number of housing units and the physical form of residential properties is smaller in Central and South Oakland, they are some of Oakland's most dense areas in terms of bedrooms.

For rental properties, the most critical issue in Oakland is the relative lack of housing availability. Rents of multi-bedroom homes are comparatively high, likely because of students renting by the bedroom.

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### CHAPTER TWO: OAKLAND THE WORKPLACE

There are an estimated 48,625 jobs in Oakland proper. 34

Most of Oakland's jobs are in West and North Oakland where the hospitals and universities are located. 34

Almost all the city's job growth between 2002 and 2010 occurred in Oakland proper. 38

Since 2010, the number of jobs in Oakland proper has declined slightly. 38

Unlike Oakland, jobs in Lawrenceville and South Side Flats grew between 2010 and 2017. The CBD lost over 2,780 jobs between 2010 and 2017.

While Oakland's job density is high compared to other Pittsburgh innovation neighborhoods, it is low compared to the national innovation neighborhoods analyzed.

Over one-quarter of Oakland's employees are over the age of 55. As compared to other Pittsburgh innovation		Oakland's major healthcare facilities are a regional destination for patients.
neighborhoods, Oakland has the greatest share of its employees 55+ years old or older.  41	Despite the low vacancy rate for office space in Oakland, there have only been three significant office	Retail, dining, and other local amenities are clustered. 71
Almost two-thirds of employees who work in Oakland earn over \$40,000 a year. 42	projects developed over the last five years. 60	With students, residents, employees, and visitors,
Oakland workers have a high level of educational attainment.	There is almost 700,000 square feet of office space under-construction or approved for development in	Oakland is a very busy place during the weekday and school year. 72
Approximately 28% of workers in Oakland live in the City of Pittsburgh.	Transportation needs, small parcel sizes, and limited	Most Oakland residents travel 20-29 minutes to work. 73
63% of employees who work in Oakland live within 10 miles of Oakland.	innovation neighborhood space in Oakland according to developers.	Oakland has high levels of pedestrian activity, but high-traffic streets make the area less safe. 74
Oakland employees with the lowest earnings are less	- <u></u>	Almost 19,000 people get off a Port Authority bus in Oakland every weekday. 76
likely to live 50+ miles from Oakland.  46	CHAPTER THREE: OAKLAND THE DESTINATION 63	104 out of the 123 bus stops in Oakland lack shelters. Of the 10 stops used by the highest number of trips,
Most employees reside within 10 miles of Oakland regardless of age. A higher percentage of younger employees live in the City.	Oakland's role as a civic center with major cultural institutions means that visitors are a significant presence in the neighborhood.	only 4 have shelters. 78  Most of the off-street parking in Oakland is provided in parking garages and structures. 82
A total of 1,761 workers in the education and healthcare sectors reside in Oakland.  49	<u> </u>	Almost every street in Oakland has managed parking as part of the residential parking permit zone, on-
Oakland has 257 residents who work in the information and professional fields, significantly fewer than the number of residents who work in the	Airbnb units currently on offer are concentrated in Central and South Oakland, with very few units in	street meters, special permit areas, or no parking allowed areas.
healthcare and education fields.	N. dall I	Oakland has high levels of pedestrian activity, but
Oakland has an active property market. 53	As a neighborhood, Oakland is served by a variety of food stores but no full-service grocery.	Oakland borders the junction of two expanding trail
Employment that requires office space is growing in Pittsburgh, including for technology-focused tenants. 57	Demand for child care facilities may continue to expand with the growth of Oakland as a job center. 68	networks – Schenley Park and the Riverfront. 88

Because of strong community advocacy, Oakland has installed significant new bike infrastructure over the last decade.

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Oakland Urban Character Typology Areas 92
Oakland Street Character Typology 111
The tallest buildings in Oakland are clustered in the core of the institutional area, the Fifth and Forbes district, and Craig Street. 124

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Additional height, along with the related measure of additional floor area ratio, has recently been requested as part of new development proposals. 124

The residential fabric of Oakland's historic neighborhoods remain largely intact. 126

As a cultural center, Oakland's landmark public destinations were built to embody the City Beautiful movement.

The largest land use in Oakland is residential, which occupies over 1/3 of the land area. 128

Existing zoning includes large areas of residential and educational/medical institutional. Only 100 acres are zoned for the highest-density, mixed-use development of the public realm districts.

Oakland's higher-density mixed use zoning districts include urban design standards for development. 132

Oakland's Institutional Master Plans detail future development sites, governing principles, and urban design and sustainability standards. 134 The total assessed value of property in Oakland is over \$3.8 billion.

Approximately 40% of the land uses in Oakland are tax-exempt. 146

Current tax abatement programs support a variety of development projects, including two affordable housing projects and a performing arts venue, as well as larger housing, office, and hotel development. 148

Oakland is served by three major sewersheds, the M-19A/B, the M-29, and the A-22.

Green infrastructure strategies are the first choice for public and private stormwater management projects. 156

Oakland's tree canopy covers only 19% of its land area, primarily on hillsides surrounding the neighborhood.

Only 23% of Oakland's tree canopy is in the core and neighborhood areas. 159

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Due to low tree canopy and high impervious surface, Oakland is an urban heat island. 160

Despite neighboring one of the City's signature open spaces, Schenley Park, Oakland overall is underserved for park and open space given its density, access constraints, and the suitability of existing park space to community needs.

### **KEY TAKEAWAYS**

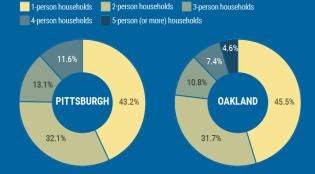
### **Population Trends**

Oakland and National Innovation Neighborhoods, 2000–2019

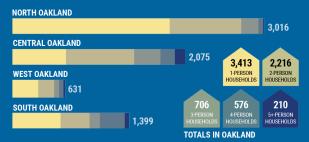


### Households by Household Size

Pittsburgh and Oakland, 2018



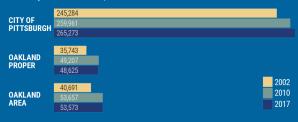
Oakland Areas, 2018



Source: U.S. Census 2000 and 2010; American Community Survey 2018 5-Year Estimates

#### **Job Trends**

The City, Oakland Proper and the Oakland Area | 2002-2017



Source: LEHD Origin-Destination Employment Statistics

#### **Education and Healthcare Workers in Oakland**



Source: LEHD Origin-Destination Employment Statistics

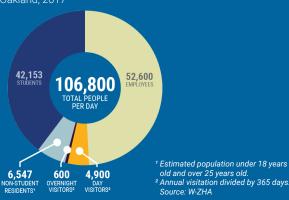
Oakland is 20% of Pittsburgh's overall job base, but 46% of its healthcare and education jobs.



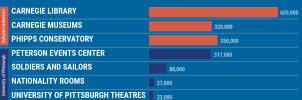
### **36%** of all healthcare jobs in Pittsburgh

### **Daily Activity (During School Year)**

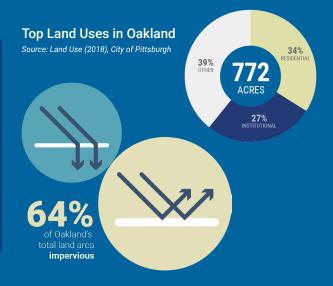
Oakland, 2017



#### Annual Admissions to Oakland Attractions



Source: Oakland Business Improvement District, Retail Market Study (2015); University of Pittsburgh, Community and Governmental Relations; Visitorship confirmed in 2019 with organization representatives.



### Acronyms and Abbreviations

AADT	Annual Average Daily Traffic
ACS	American Community Survey
ADA	Americans with Disabilities Act
AMI	Area Median Income
BRT	Bus Rapid Transit
CBD	Central Business District
CBRE	Coldwell Banker Richard Ellis
CMU	Carnegie Mellon University
CSO	Combined Sewer Overflow
DCP	Department of City Planning
DOMI	Department of Mobility and Infrastructure
FTE	Full-Time Equivalent
GAP	Great Allegheny Passage
НН	Household
HUD	Department of Housing and Urban Development
IMP	Institutional Master Plan
LED	Light-emmiting diode
LEHD	Longitudinal Employer-Household Dynamics
LERTA	Local Economic Revitalization Tax Assistance
MARTA	Metropolitan Atlanta Rapid Transit Authority
MBTA	Massachusetts Bay Transportation Authority
MIT	Massachusetts Institute of Technology
MUH	Montefiore University Hospital
NCAA	National Collegiate Athletic Association
NICU	Neonatal Intensive Care Unit
NIH	National Institutes of Health
OBID	Oakland Business Improvement District
OPDC	Oakland Planning and Development Corporation
PADEP	Pennsylvania Department of Environmental Protection
Pitt	University of Pittsburgh
PNC	PNC Financial Group Services
PTC	Pittsburgh Technology Center
PUH	Presbyterian University Hospital
PWSA	Pittsburgh Water & Sewer Authority
R&D	Research & Development
TBD	To be determined
TDM	Transportation Demand Management
UC	Under-Construction
URA	Urban Redevelopment Authority of Pittsburgh
UPMC	University of Pittsburgh Medical Center
VA	Veteran Affairs
WPIC	Western Psychiatric Institute and Clinic

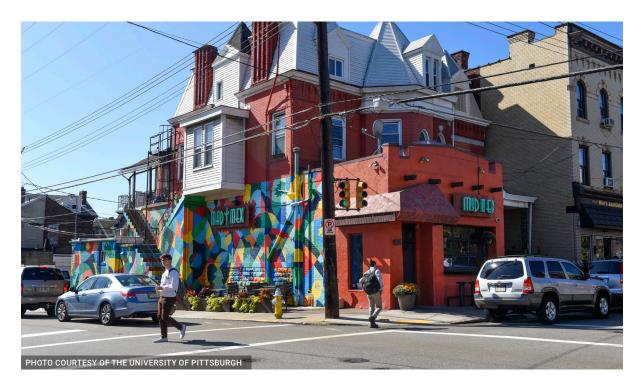
### INTRODUCTION

### **Purpose**

This Existing Conditions Report for the Oakland Plan provides a common set of tools, baselines, and data for discussion during the neighborhood plan process, based on a variety of sources including the Census, market transactions, City and County data sources, site surveys, and analysis. Community members and participants will bring their own experiences, needs, history, and deeper understanding to many topics that data cannot fully address.

The City of Pittsburgh, led by the Department of City Planning (DCP) is working with the Oakland community to create a 10-year plan with a shared vision for Oakland's future and the projects and programs necessary to make that vision a reality.

Once adopted by the Planning Commission, the Oakland Plan will become City policy and guide public and private investments in the area. New land use regulations, transportation and infrastructure improvements, and public programs may also be recommended by the plan. The plan area generally includes the areas of North Oakland, Central Oakland, South Oakland, and West Oakland.



The City of Pittsburgh conducts planning efforts based on the Neighborhood Plan Guide, which establishes standards for plans that will be adopted by the City Planning Commission. The Oakland Plan will establish vision statements that provide a shared description of what the neighborhood will be in 10 years if the plan is successful and determine goals that the plan will achieve by implementing programs, policies, and projects.

More information about this guide can be found at: <a href="https://pittsburghpa.gov/dcp/neighborhood-planning-guide">https://pittsburghpa.gov/dcp/neighborhood-planning-guide</a>.

The Oakland Plan will address a core set of topics, including: Community, Development, Mobility, and Infrastructure. The Community topic focuses on meeting the needs of residents, employees, students, and stakeholders. The Development section focuses on maximizing the benefits of new development for the community. The Mobility section focuses on making it easier, safer, and healthier for people to get around. The Infrastructure section focuses on nourishing neighborhoods through new energy, stormwater, and open space systems.

The Department of Mobility and Infrastructure (DOMI) will be leading additional planning work for the Mobility Chapter to address transportation, in its various forms, and parking. As part of that effort, DOMI and its consultants will be collecting and analyzing new data on commute and travel patterns, parking, and transit use in the Oakland area to support a well-connected, safe, accessible, and multi-modal Oakland. Independent of this

planning effort, DOMI and DCP will be conducting long-term, citywide planning efforts, including the 2070 Mobility Plan and Citywide Comprehensive Plan, that may offer additional context for the Oakland Plan and spur new ideas and evaluation during the community planning process.

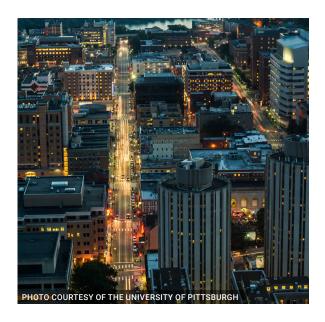
The open data tools and analysis provided through the Western Pennsylvania Regional Data Center were an essential data source for this report and ongoing tool for community evaluation and analysis. Additional resources provided by the data center can be found: <a href="http://www.wprdc.org/">http://www.wprdc.org/</a>.

### **Previous Planning Studies**

This Existing Conditions Report builds upon the findings of recommendations of several community planning efforts and research, including, among others:

- The Oakland Plan 2025 (Oakland Planning and Development Corporation, 2010)
- Innovation Oakland (2010)
- Oakland Retail Market Study (Oakland Business Improvement District, 2015)
- Green First Plan (Pittsburgh Water & Sewer Authority, 2016)
- Capturing the next economy: Pittsburgh's rise as a global innovation City (Brookings Institute Report, 2017)

In addition to several citywide planning and community development initiatives, including, among others:



- The Affordable Housing Task Force Report (2016)
- City Steps Master Plan (2017)
- Open Space PGH (2013)
- Preserve PGH (2012)

Many community members, stakeholders, and leaders who participated in the neighborhood planning process and offered their expertise as part of interviews to inform this report.

### **CHAPTER THREE:**

## **OAKLAND THE DESTINATION**

### **Key Takeways**

- Oakland is a regional destination for culture and education. Its Carnegie Library, Carnegie Museums, and Phipps Conservatory together attract over 1.3 million visitors annually, and University of Pittsburgh event venues attract another 455,000. 217,000 visitors stay in Oakland's eight hotels each year. All told, Oakland hosts 5,500 visitors on an average day. On an average weekday when universities are in session, they are joined by over 44,000 university and primary/secondary school students, over 6,500 non-undergraduate residents, and over 52,000 employees.
- Three primary nodes of restaurant and retail establishments are present in Central and North Oakland. A smaller cluster is present around Bates and Semple. Various small food and convenience stores are present, but no full-service grocery.
- Oakland's topography channels transportation into a limited set of primary street corridors.
   Parallel Forbes Avenue and Fifth Street form

- the major spine through Oakland's core, with Boulevard of the Allies, Centre St, and North Craig Street also serving as important spines.
- Oakland depends heavily on the 23 Port
   Authority bus routes serving it. It has
   Pittsburgh's second highest transit ridership
   after downtown, and this ridership has grown.
   Consequently, new high-frequency bus rapid
   transit routes are planned through Oakland
   with connections to Downtown, Lawrenceville,
   and Squirrel Hill. Oakland's medical and
   educational institutions supplement public
   transit with extensive shuttle networks.
- UPMC, Pitt, and CMU together control nearly 13,000 garage parking spaces in Oakland.
   At least 6,300 off-street parking spaces are available to the public. Parking is in heavy demand, with years-long waiting lists at some institutions, and growing outpatient volume at Oakland's medical facilities. Yet existing parking locations also represent some of the most desirable sites for major new academic,

- medical, office, and residential development. Pitt's IMP proposes to offset removal of 2,000 parking spaces with increased incentives to use transit, bike, or walk.
- As a compact urban district with an extensive street grid, Oakland sees high levels of pedestrian activity among its many proximate destinations. Although most streets offer functional sidewalks, many streets warrant additional street trees, improved crosswalks, or other features to enhance comfort and safety. The Boulevard of the Allies has particularly poor pedestrian facilities and a vast width dedicated to vehicles, inhibiting connections among portions of South and Central Oakland.
- Bike infrastructure in and around Oakland has improved significantly in the past decade, but still lacks connections through the core of Oakland necessary to complete a continuous network of safe, inviting routes.

### OAKLAND THE DESTINATION

Oakland's role as a civic center with major cultural institutions means that visitors are a significant presence in the neighborhood.

In total, attractions in Oakland admit approximately 1.8 million visitors a year.

Oakland contains a number of significant visitor

attractions, including the Carnegie Library, Carnegie Museum of Natural History, Carnegie Museum of Art, and Phipps Conservatory. Together these major cultural institutions have over 1.3 million visits a year. University of Pittsburgh venues attract another half million visitors to Oakland each year.

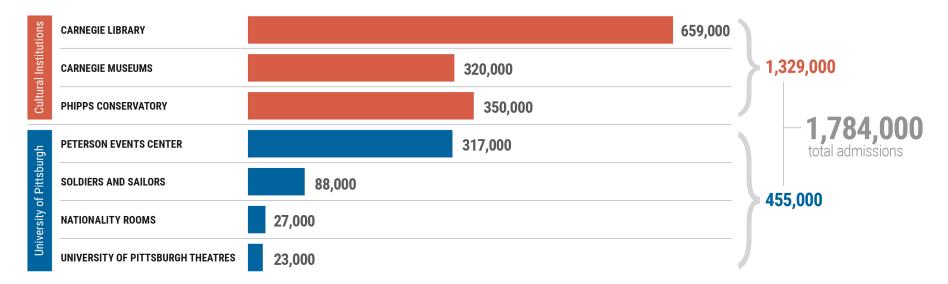
The universities also generate significant visitor activity for admissions activities, athletic events, alumni gatherings, conferences, and other academic and campus events such as commencement. CMU reports that they host a total of 671 events per year that accommodate over 80,000 visitors. They estimate that almost

83% of these visitors are from outside of Pennsylvania.

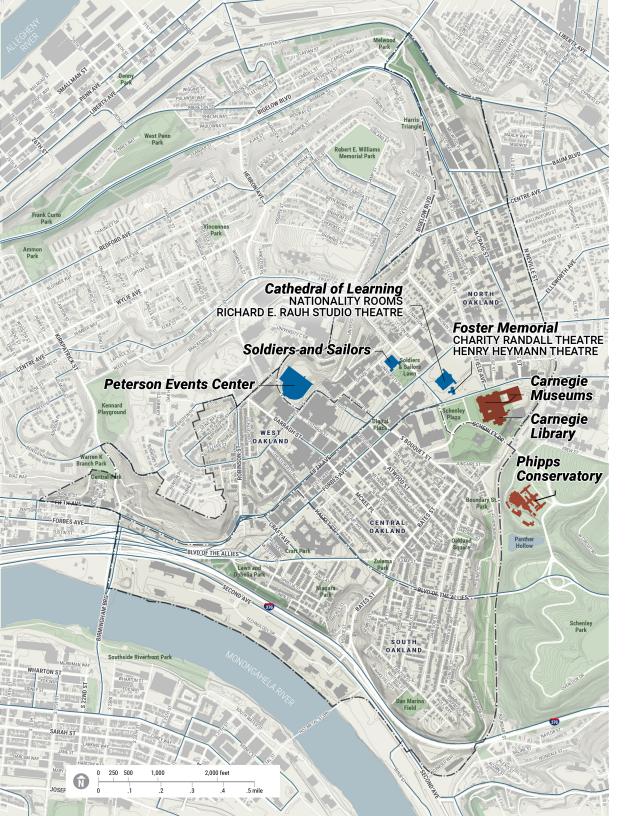
Academic conferences and convenings can be particularly important to supporting a culture of innovation. Together, the universities host over 28,000 visitors for academic conferences.

In Fiscal Year 2019, Pitt hosted 256 events with over 17,631 attendees. CMU hosted 216 conferences for 10,832 visitors, and estimate that approximately half of conference attendees are attending from out of state. The healthcare institutions also generate visitors to Oakland as patients and visitors.

#### **Annual Admissions to Oakland Attractions**



Source: Oakland Business Improvement District, Retail Market Study (2015); University of Pittsburgh, Community and Governmental Relations; Visitorship confirmed in 2019 with organization representatives.



### **Oakland Attractions**

Bus Routes

Cultural Institutions

University of Pittsburgh

### There are eight hotels and 1,168 hotel rooms in Oakland today.

There are an estimated 217,000 hotel visitors to Oakland annually. There has been recent hotel development in Oakland, including the higherend Oaklander Hotel, as well as in other nearby neighborhoods. In addition to business, academic, and leisure travel, some hotels accommodate patients and their caregivers who are traveling for outpatient healthcare services at UPMC. With many different customer bases, hotels are spread throughout North, South, East, and West Oakland.

#### **Hotel Visitation Estimate**



Source: Hotels.com; Hotel Interview

### Hotel Supply in Oakland

Hotel	Number of Rooms
Hampton Inn Pittsburgh University/ Medical Center 3315 Hamlet Street	132
Hilton Garden Inn University Place 3454 Forbes Avenue	202
Hotel Indigo Pittsburgh—Technology Center 329 Technology Drive	111
The Oaklander Hotel 5130 Bigelow Boulevard	167
Quality Inn University Center 3401 Boulevard of the Allies	119
Residence Inn by Marriott Pittsburgh/ Medical Center 3896 Bigelow Boulevard	174
Residence Inn Oakland/University Place 3341 Forbes Avenue	144
Wyndham University Center 100 Lytton Avenue	251
<b>TOTAL</b> Source: Hotels.com; Hotel Interview	1,168

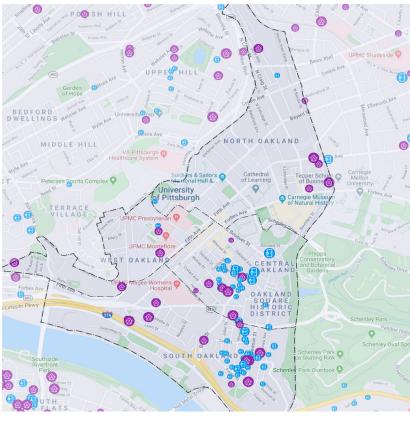
## Airbnb units currently on offer are concentrated in Central and South Oakland, with very few units in North Oakland.

In a search for an October 2019 Airbnb rental, 65 places were listed in Oakland. The majority are offerings for a private room, rather than a whole unit rental.

Generally, whole unit Airbnb rentals have a greater effect on communities than the private room accommodations most prevalent in Oakland because whole unit rentals remove long-term rentals from the housing supply in a neighborhood, replacing neighbors with visitors, and attract larger groups of visitors with less on-site supervision. If Airbnb rentals become a quality of life concern in Oakland, restricting whole unit rentals may be necessary.

Based on reviews on the Airbnb platform, the use of whole unit rentals appear to closely correlated with commencement activities at Pitt and CMU, where there are significant numbers of family visitors who may be seeking different types of accommodations like Airbnb units and hotel capacity is full.





### **Hotels**



Number of Rooms



**Concert Hall** 



Museum



Theatre



Public Art

Sources: hotels.com, Hotel Interview

### **Airbnb**

#### **RENTAL TYPE**



**Entire Home** 



**Private Room** 

Source: https://www.airdna.co/

## As a neighborhood, Oakland is served by a variety of food stores but no full-service grocery.

### Oakland does not have a full-service grocery, although it does have five specialty markets.

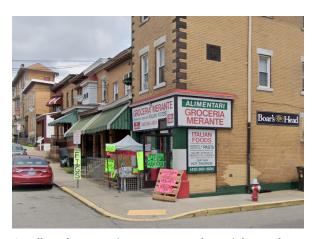
It also has a half dozen convenience stores that offer food items, two seasonal farmers markets, and a food pantry run through Community Health Services. Specialty markets include one focused on Italian products, two focused on Indian products, one on Korean products, and one student-oriented market on Pitt's campus. Another market with fresh produce is planned for a new CMU building on Forbes Avenue. There are full-service grocery stores in nearby areas, including East Liberty, Shadyside, Bakery Square, Greenfield, and Southside. Current grocery trends include smaller format specialty stores like those found in Oakland and expanded grocery delivery and pick-up services.

#### Farmers Markets

Name/Location	Schedule
<b>Pitt Farmers Market</b>	Aug-Oct
William Pitt Union	Thursday 10:30-2
Oakland Farmers Market	Jul-Oct
Schenley Plaza	Friday 2–6pm

## Demand for child care facilities may continue to expand with the growth of Oakland as a job center.

Based on state licensing data for child care facilities, there are at least 10 facilities in Oakland with approximately 720 slots. The largest are the Children's Center of Pittsburgh, which is associated with UPMC and includes a Get-Well room for mildly-ill children and Small Wonders at the UPMC in North Oakland. The University of Pittsburgh Child Development Center



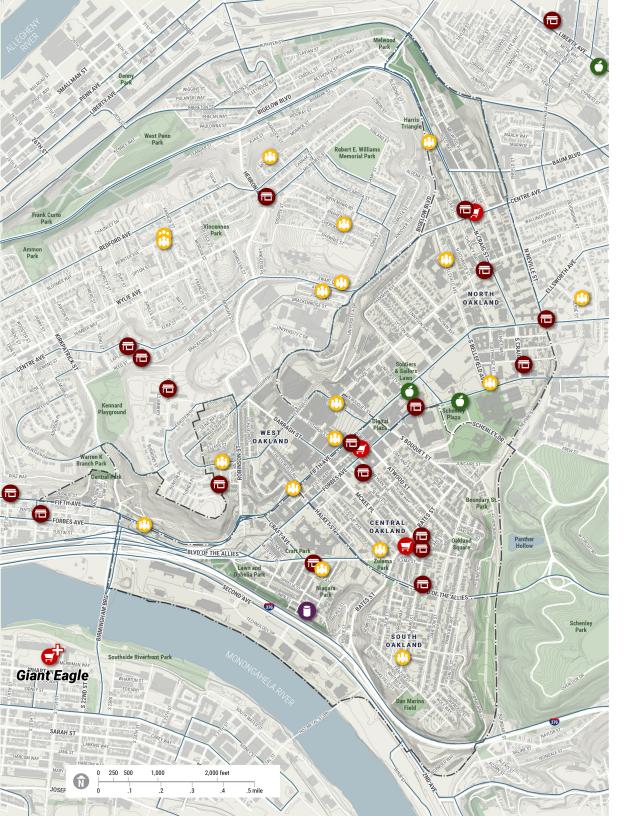
Small-scale convenience stores and specialty markets are located in Central Oakland, North Oakland, and along the Fifth and Forbes Corridors.

provides childcare services only to those affiliated with the University of Pittsburgh. There are also early learning centers at the Campus Laboratory School of Carlow University and Chartiers Early Childhood Center that provide childcare services as part of a larger school or program.

While the amount of child care slots exceeds national standards for designating a child care desert, due to the low number of resident children in Oakland, there are less child care slots in Oakland than there are in downtown.

#### State-Licensed Child Care Facilities

Name	Provider Type	Capacity
Children's Center of Pittsburgh (UPMC)	Early Learning Center	159
Small Wonders at the UPMC	Early Learning Center	154
University of Pittsburgh Child Development Center	Early Learning Center	140
Oakland Sunshine Daycare and Learning Center	Child Care Center	72
Matilda Theiss Child Development Center	Child Care Center	71
A Child's VIEW	Child Care Center	63
Matilda Theiss Hill House	Child Care Center	25
Monroe's Clubhouse Childcare Center	Child Care Center	18
ACATL Family Daycare	Group Child Care Home	12
Ms Bee's Day Care Home	Family Child Care Home	6



### **Support Facilities**

Bus Routes

Child Care

### **FOOD STORES**

Convenience Store

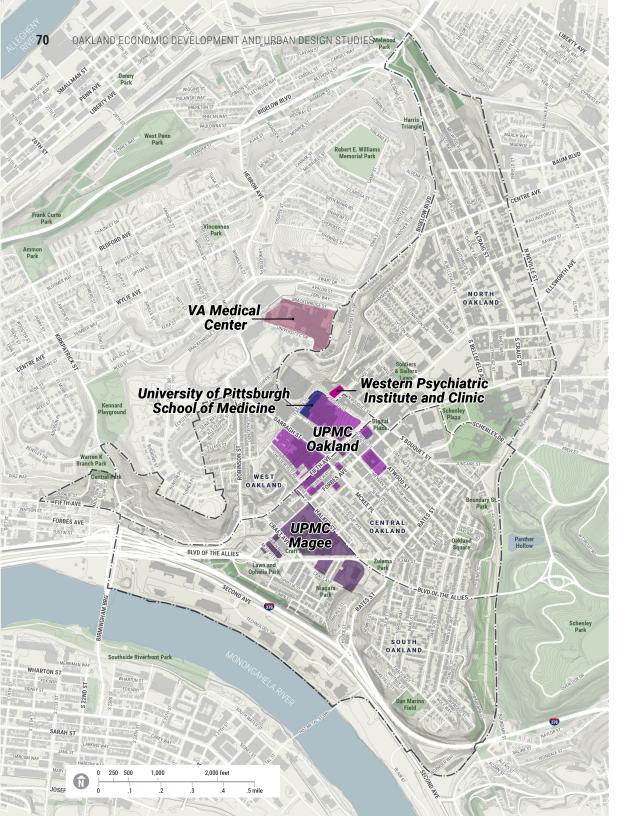
Market

Full-Service Grocery

**6** Farmers Market

Food Pantry

Sources: Farmers Market (2017), Food Stores (2016) from WPRDC, corrected 2019. Child Care (Commonwealth of Pennsylvania, Human Services, 2019).



### Oakland's major healthcare facilities are a regional destination for patients.

Patients seeking care and their visitors travel to Oakland from across the region. As part of interviews, hospital officials expressed that they are moving to provide more outpatient services at their Oakland facilities. Over time, this transition could increase the number of patients in Oakland on a given day, while holding the number of inpatient beds constant.

### **Major Healthcare Facilities**

Pitt School of Medicine

UPMC Magee-Womens Hospital

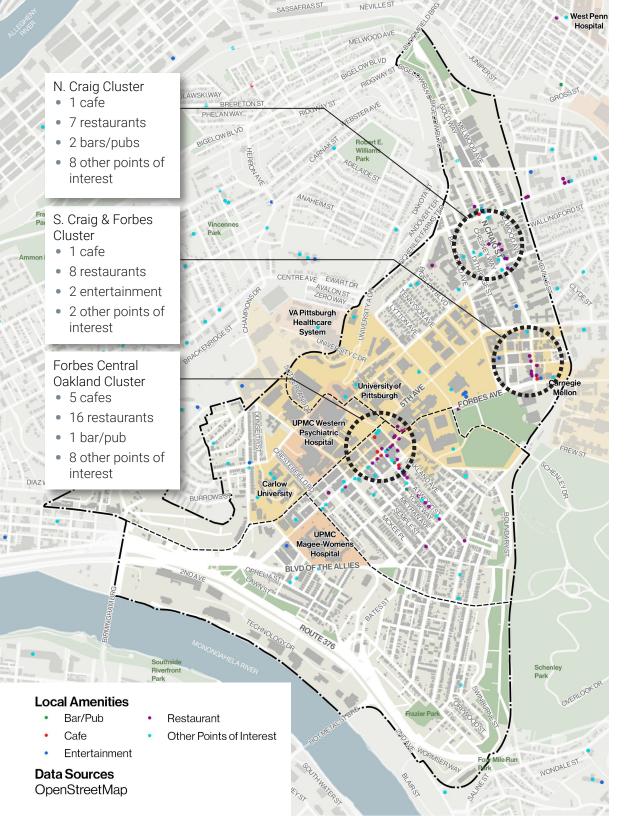
UPMC Oakland Hospital

Western Psychiatric Institute and

Clinic

VA Medical Center

Sources: Parcels owned by each university from Magee-Women's Hospital of UPMC, University of Pittsburgh, and UPMC Oakland.



### Retail, dining, and other local amenities are clustered.

The residents of the Oakland neighborhood have approximately \$170 million to \$185 million in consumer spending capacity. Approximately \$160 million of that is in non-automotive retail, with an additional \$20 million in restaurant spending.

Estimated retail sales in Oakland are \$247 million, annually with \$72 million for dining. Estimated sales far exceed the consumer spending capacity, demonstrating how Oakland functions as a destination for spending by visitors and workers. However, most of the retail amenity base is student-focused and dominated by fast casual restaurants and sundry-focused retail.

Retail, dining, and entertainment amenities are clustered most intensely on the Fifth and Forbes Avenue Corridors and Craig Street.

#### **Local Amenities**

	North Oakland	Central Oakland	West Oakland	South Oakland	Oakland Total
Bars/Pubs	4	2	-	-	6
Cafes	3	4	-	-	7
Restaurants	23	24	-	-	47
Entertainment	6	-	2	1	9
Other Points of Interest	20	23	7	5	55
TOTAL	56	53	9	6	124

OpenStreetMap data was used to locate and categorize local amenities, symbolized as colored points. OpenStreetMap is a volunteer crowdsourced effort, so there are likely amenity locations missing from this dataset. There were many additional amenity types in the dataset, as well as many uncategorized data points. Amenity types other than those listed above were grouped into a generic category labeled "Other Points of Interest".

#### POINT OF DISCUSSION

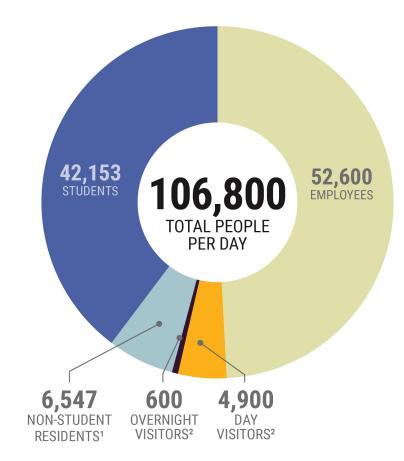
Can redevelopment along the Boulevard of the Allies and near the intersection of Craft Street and Fifth Avenue be incentivized to provide neighborhood-serving amenities for the adjacent residential areas in Central, South, and West Oakland?

## With students, residents, employees, and visitors, Oakland is a very busy place during the weekday and school year.

There are an estimated 106,800 people in Oakland on a given weekday of the school year.

The greatest single number of people in Oakland during peak times are workers, who are almost 49% of the daytime population.

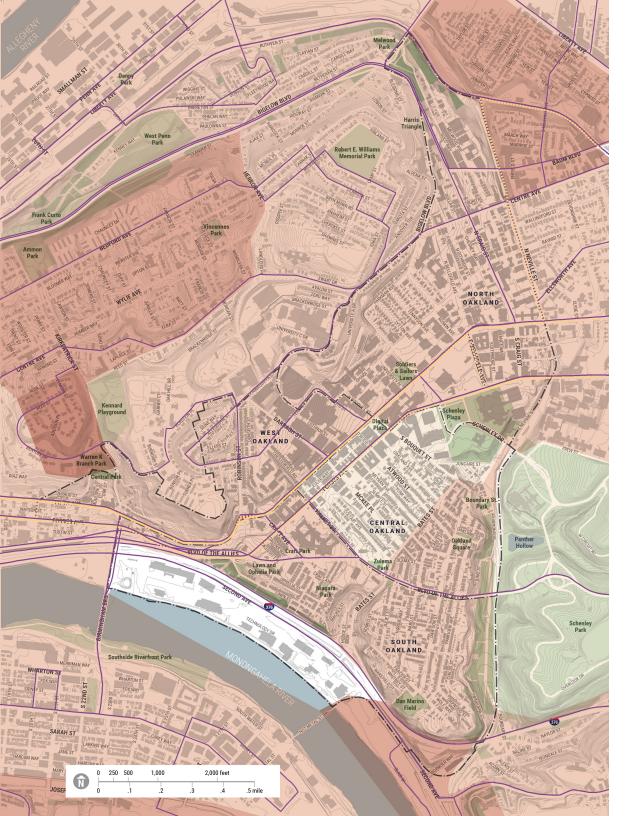
Daily Activity (During School Year) in Oakland, 2017



<sup>&</sup>lt;sup>1</sup> Estimated population under 18 years old and over 25 years old.

Source: W-ZHA

<sup>&</sup>lt;sup>2</sup> Annual visitation divided by 365 days.



### Most Oakland residents travel 20-29 minutes to work.

Residents of Central Oakland have the shortest commutes, with residents traveling less than 20 minutes. For residents who walk to work, 20 minutes represents approximately a mile walk. Given how closely located Central Oakland is to major job centers at UPMC, Pitt, and CMU it has an average shorter commute. There is not data for the Pittsburgh Technology Center due to the lack of residents.

### POINT OF DISCUSSION

The Hill District is adjacent to Oakland, but has longer travel times. Making it easier to get between these two areas could improve access to jobs for Hill District residents.

### **Travel to Work**

#### **AVERAGE TRAVEL TIME**

Less than 20 minutes

20-29 minutes

30-39 minutes

More than 40 minutes

---- Bus Routes

New Proposed BRT

Sources: Travel Time from the 2013–2017 5-Year American Community Survey, US Census Bureau, Bus Routes, Stops, and Proposed BRT (2019),Port Authority of Allegheny County; Shuttle Routes (2019), CMU and University of Pittsburgh.

## Oakland has high levels of pedestrian activity, but high-traffic streets make the area less safe.

The topography and street grid of Oakland channel traffic onto a few major corridors. Key entrances to Oakland, including Baum Boulevard and gateway segments of each major corridor, carry some of the highest average annual daily traffic in Oakland. The major corridors of Oakland – Boulevard of the Allies, Fifth Avenue, Forbes Avenue, and Craig Street all have high-traffic volumes . Bates Street, which provides additional gateway access and is a key north-south connection across South and Central Oakland, also carries high volumes as a result.



The top 10 highest traffic street segments in Oakland each carry over 14,000 vehicles a day. The top 4 carry over 20,000 a day.

Vehicle to vehicle crashes tend to occur most densely along corridors with high volumes of traffic, with concentrations along portions of Forbes Avenue, Baum Boulevard, Fifth Avenue, Boulevard of the Allies, and Bates Street. There is also a more widespread pattern of vehicle to vehicle collisions at intersections throughout North and Central Oakland. Crashes on local neighborhood streets tend to be more dispersed. There were 275 total reported crashes in Oakland in 2018. The vast majority, 233, were vehiclevehicle or solo-vehicle crashes. A solo-vehicle crash involves one vehicle and the surrounding environment, such as a pole, tree, median, or other structure. Three crashes involved a bus and a vehicle.

Most crashes involving a pedestrian were located in high-density corridors with high levels of pedestrian activity. There were 37 pedestrian-vehicle crashes in Oakland in 2018

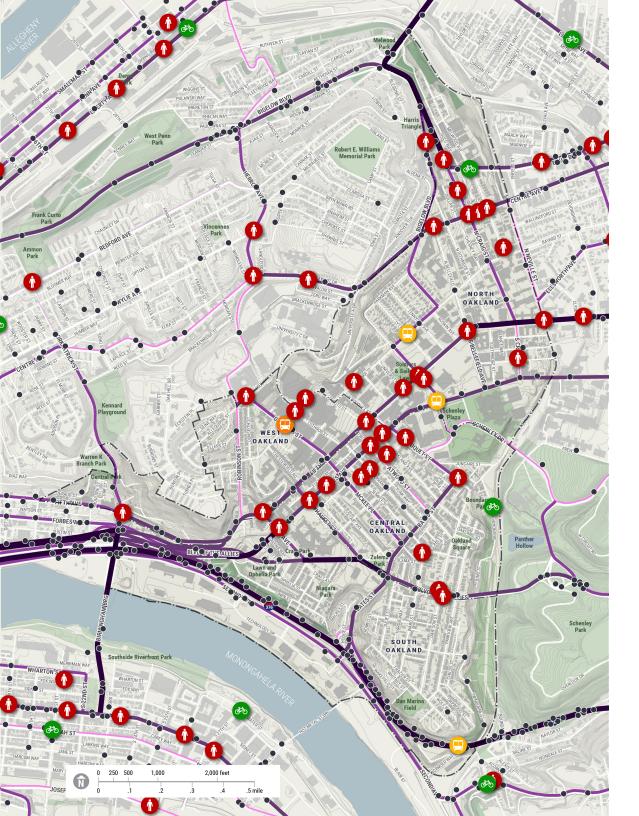
and one pedestrian-bus crash. There were crashes throughout the Fifth Avenue and Forbes Avenue corridors, and approaching areas of high-activity along Terrace Street and Sennott Street. Segments with crashes on Baum Boulevard and Centre Avenue extend into the adjacent Shadyside neighborhood. In the case of Baum Street, most pedestrian crashes occurred in the Shadyside segment.

There were two bicycle-vehicle crashes in Oakland in 2018, with one located just past the end of the Junction Hollow Trail along Boundary Street, an important corridor for accessing the trail network by cycling. The second was located at the corner of Baum Boulevard and Melwood Avenue. Melwood Avenue includes sharrows as part of an on-street bike route. There were also two vehicle crashes in this location during the same time period.

Highest Traffic Street Segments (2018)	Annual Average Daily Traffic (AADT)
Boulevard of the Allies (Bates Street to Craft Avenue)	24,814
Craig Street (Bloomfield Bridge to Baum Boulevard)	21,682
Forbes Avenue (Craft Avenue to Ophelia Street )	21,614
Fifth Avenue (S. Bellefield Avenue to Wilkins Avenue)	21,480
Baum Boulevard (N. Craig Street to Busway)	19,393
Boulevard of the Allies (Craft Avenue to Forbes overpass)	18,723
Bates Street (376 Highway to Boulevard of the Allies)	18,394
Bates Street (Boulevard of the Allies to S. Bouquet Street)	14,891
Forbes Avenue (Craft Avenue to S. Bellefield Avenue)	14,830
Boulevard of the Allies (Bates Street to Overlook Drive)	14,495

Top Street Segments for Crashes (2018)	Number of Crashes
Vehicle-Vehicle Crashes	
Forbes Avenue (Birmingham Bridge to S. Negley Street)	23
Baum Boulevard (S. Negley Avenue to N. Craig Street)	23
Fifth Avenue (Birmingham Bridge to N. Negley Avenue)	18
Boulevard of the Allies (Birmingham Bridge to Panther Hollow Trail)	16
Bates Street (Second Avenue to S. Bouquet Street)	8
Vehicular-Pedestrian and Cyclist Crashes	
Baum Boulevard (S. Negley Avenue to N. Craig Street)	5
Fifth Avenue (Birmingham Bridge to N. Negley Avenue)	5
Sennott Street	4
Centre Avenue (Bigelow Boulevard to N. Negley Avenue)	4
Terrace Street	3

Note: I-376 is not included in the charts above due to its unique status as an interstate highway. It carries higher volumes and results in more vehicle crashes than any other road in the network. It is included in the total crash number.



### Traffic Volume and Crashes

### **AVERAGE ANNUAL DAILY TRAFFIC**

- < 2,000 Vehicles</p>
- \_\_\_\_\_ 2,001-5,000 Vehicles
- \_\_\_\_\_ 5,001-10,000 Vehicles
- 10,001-20,000 Vehicles
- > 20,001 Vehicles

### **CRASHES (275 TOTAL IN 2018)**

- Vehicle-Vehicle or Vehicle-Only Crash (233 total)
- Vehicle-Pedestrian Crash (37 total)
- Bus-Vehicle Crash (3 total)
- Vehicle-Bicycle Crash (2 total)
- Bus-Pedestrian Crash (1 total)

### **FATALITIES**

There were no fatal crashes within the neighborhood of Oakland in 2018.

#### **INJURIES**

140 people were injured in crashes.117 out of 275 total crashes resulted in injuries.

Sources: Crashes (2018), PennDOT; Traffic Volumes (2019), PennDOT.

## Almost 19,000 people get off a Port Authority bus in Oakland every weekday.

According to the Port Authority's most recent annual report, routes that enter Oakland are responsible for increases in bus ridership overall from 2017–2018. This growth is particularly impressive given the service cuts to Oakland routes that occurred in 2011.

Oakland has the second-highest transit ridership in Pittsburgh, after downtown, with average weekday disembarking at 19,000 and befitting its role as a major employment center.

The Port Authority provides rapid, commuter, and local bus service as part of 23 routes that have stops in Oakland. The overwhelming majority of

these routes, 19 out of 23, connect Oakland with downtown as part of the Downtown – Oakland – East End Corridor. Paratransit services are also provided.

High-frequency bus service is concentrated on the Fifth Avenue and Forbes Avenue Corridor, and Craig and Centre Streets. High-frequency bus service includes routes where the bus comes more often, at least every 15 minutes during the weekday, which means riders have shorter waits and faster overall travel times. Routes on Second Street and Boulevard of the Allies have lower frequencies. Additional routes serve the UPMC area and connect to the Hill District. In addition to local bus service, there are three commuter routes, including one to the airport.

Due to current high ridership along the corridor, potential to link neighborhoods and employment centers, and goal to improve public transit travel time and capacity, bus service on Fifth Avenue and Forbes Avenue has been selected for improvements to BRT service in the future. Implementing BRT will achieve a key recommendation of the Oakland 2025 Plan.

### Key Corridors in Oakland with Multiple Bus Routes

Street	# of Routes	Average D	aily Riders \	Weekdays
		Minimum	Maximum	
Fifth Avenue	18	1,065 (58)	6,314 (61C)	65,789
Forbes Avenue	10	1,065 (58)	6,314 (61C)	32,147
N. Craig Street (between Fifth/Bayard)	4	2,010 (93)	6,814 (71A)	17,724

### Oakland Routes - Type of Service

Route	e/ Route Name	Service			
Comr	Commuter				
28X	Airport Flyer	Daily Service			
65	Squirrel Hill	Weekdays			
P3	East Busway- Oakland	Weekdays			

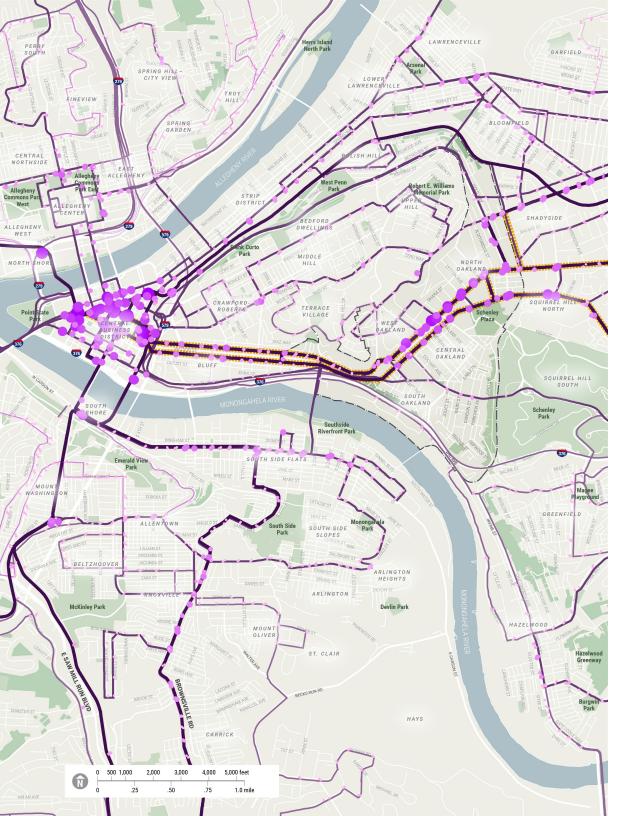
Route	/ Route Name	Service
Local		
54	North Side- Oakland-South Side	Daily Service
56	Lincoln Place	Daily Service
57	Hazelwood	Daily Service
58	Greenfield	Daily Service
61A	Swissvale	Daily Service
61B	Braddock- Swissvale	Daily Service
61C	McKeesport- Homestead	Daily Service
61D	Murray	Daily Service
67	Monroeville	Daily Service
69	Trafford	Daily Service
71A	Negley	Daily Service
71B	Highland Park	Daily Service

Route	e/ Route Name	Service
Local		
71C	Point Breeze	Daily Service
71D	Hamilton	Daily Service
75	Ellsworth	Daily Service
77	Penn Hills	Daily Service
81	Oak Hill	Daily Service
82	Lincoln	Daily Service
83	Bedford Hill	Daily Service
93	Lawrenceville -Oakland- Hazelwood	Weekdays

### Oakland Routes - Ridership Ranking

Route	Route Name	Type of Service	Avg Wkdy
61C	McKeesport-Homestead	Local	6,314
71A	Negley	Local	5,814
71C	Point Breeze	Local	5,812
61D	Murray	Local	5,451
71B	Highland Park	Local	5,199

All of the highest ridership routes in Oakland travel along Fifth Avenue.



### Public Transportation Ridership

Proposed Bus Rapid Transit (BRT)

#### **AVERAGE WEEKDAY BOARDINGS PER STOP**

- 1-50
- 51-100
- 101-200
- 201-400
- 401-800
- 801-1,200
- 1,201-2,000
- 2,001-3,000
- 3,001-5,000
- > 5,001

### AVERAGE WEEKDAY BUS RIDERSHIP OF HIGHEST ROUTES

< 500 Riders

501-1,000 Riders

\_\_\_\_\_ 1,001-2,000 Riders

2,001-5,000 Riders

> 5,001 Riders

**Note:** On key corridors with multiple bus routes, such as sections of Downtown, Fifth and Forbes Avenues, and Brownsville Road, the cumulative ridership is higher. The highest ridership route is represented.

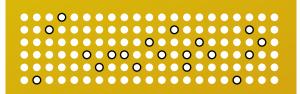
Sources: Bus Routes, Stops, and Proposed BRT (2019); Port Authority of Allegheny County.

Bus stops on Fifth and Forbes Avenues serve multiple routes, with up to 18 routes using stops at Fifth Avenue at Chesterfield Road and Fifth Avenue at Thackeray. Outside of the Fifth Avenue and Forbes Avenue corridors, stops are served by one to four routes.

Most shelters are provided by the City of Pittsburgh; a small number are provided by the Port Authority. They are clustered along the high-volume Fifth Avenue and Forbes Avenue corridors. Shelters along Boulevard of the Allies and Second Avenue are along bus routes with more infrequent service where waits may be longer.

Bus stops on the Fifth Avenue corridor serve 1,000–4,000 trips a day, with the highest use in the center of Oakland. These locations serve routes in both directions as part of a pair of inbound and outbound stops because of a contraflow bus lane on Fifth Avenue. Routes along the Forbes Avenue corridor, which only travel east after Halket Street, serve between 500–1,000 riders.

Most stops on Craig Street serve between 200–500 riders; stops on Boulevard of the Allies serve approximately 20–100 trips and other stops average less than 20 trips.



104 out of the 123 bus stops in Oakland lack shelters. Of the 10 stops used by the highest number of trips, only 4 have shelters.

Top Bus Stops by Use	# Routes Served	Routes Served	Shelter	Average Boardings (FY19)	Average Drop-offs (FY19)	Average Total (FY19)
Fifth Avenue at Atwood Station	13	28X, 54, 61A, 61B, 61C, 61D, 67, 69, 71A, 71B, 71C, 71D, 75	PAAC Shelter	1,375	2,734	4,109
Fifth Avenue at Thackeray Avenue	18	28X, 54, 58, 61A, 61B, 61C, 61D, 67, 69, 71A, 71B, 71C, 71D, 75, 81, 83, 93, P3	No Shelter	951	1,876	2,826
Fifth Avenue at Chesterfield Road	18	28X, 54, 58, 61A, 61B, 61C, 61D, 67, 69, 71A, 71B, 71C, 71D, 75, 81, 83, 93, P3	City of Pittsburgh Shelter	1,003	1,093	2,096
Fifth Avenue at Oakland Avenue	8	54, 71A, 71B, 71C, 71D, 75, 93, P3	No Shelter	1,402	656	2,059
Fifth Avenue at Tennyson Avenue	16	28X, 54, 58, 61A, 61B, 61C, 61D, 67, 69, 71A, 71B, 71C, 71D, 75, 93, P3	City of Pittsburgh Shelter	613	885	1,498
Fifth Avenue at Bigelow Boulevard (Pitt)	8	54, 71A, 71B, 71C, 71D, 75, 93, P3	No Shelter	1,058	359	1,417
Fifth Avenue opposite Thackeray Avenue	8	54, 71A, 71B, 71C, 71D, 75, 93, P3	No Shelter	986	406	1,392
Fifth Avenue at Bigelow Boulevard (Pitt)	16	28X, 54, 58, 61A, 61B, 61C, 61D, 67, 69, 71A, 71B, 71C, 71D, 75, 93, P3	City of Pittsburgh Shelter	458	912	1,370
Forbes Avenue at Atwood Street	8	28X, 58, 61A, 61B, 61C, 61D, 67, 69	No Shelter	730	462	1,192
Fifth Avenue at McKee Place FS	8	54, 71A, 71B, 71C, 71D, 75, 93, P3	No Shelter	713	401	1,114

Source: Bus Stops, Routes, and Ridership; Port Authority (2019)



### Bus Ridership and Bus Stops Usage

· Proposed BRT

Bus Stop

O Bus Stop with Shelter

### **AVERAGE WEEKDAY BUS STOP USAGE**

4,000 Riders
2,000 Riders
1,000 Riders
200 Riders
50 Riders

Boardings

Drop-Offs

### AVERAGE WEEKDAY BUS RIDERSHIP OF HIGHEST ROUTE

< 500 Riders</p>

---- 501-1,000 Riders

\_\_\_\_\_ 1,001-2,000 Riders

\_\_\_\_\_ 2,001-5,000 Riders

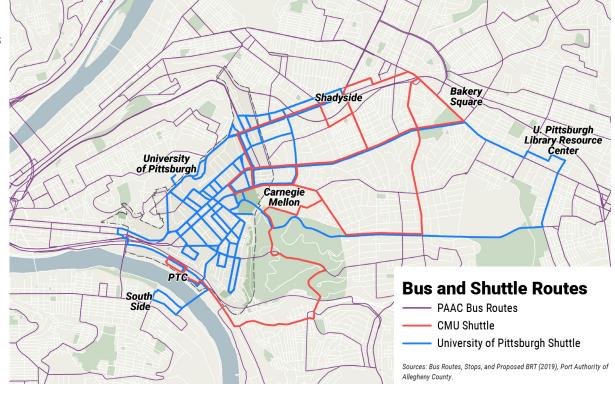
> 5,001 Riders

**Note:** On key corridors with multiple bus routes, such as sections of Fifth and Forbes Avenues, the cumulative ridership is higher. The highest ridership route is represented.

Sources: Bus Routes, Stops, and Proposed BRT (2019); Port Authority of Allegheny County.

The University of Pittsburgh operates 13 shuttles connecting the Southside, Pittsburgh Technology Center, hospitals, campus, parking, and residential facilities. The shuttles travel throughout the West, South, Central, and North Oakland areas.

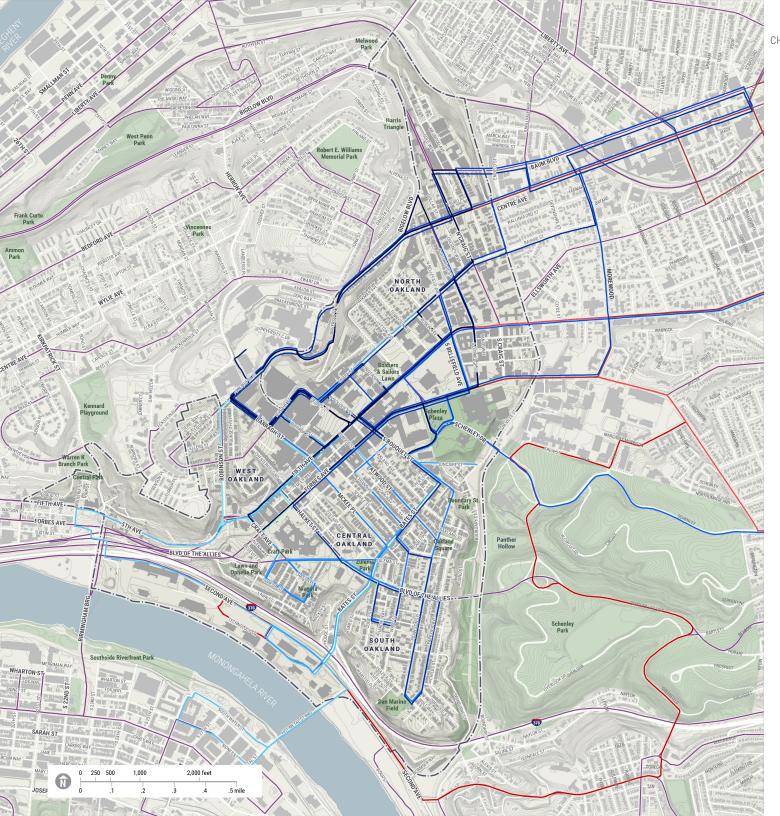
Carnegie Mellon operates six shuttles connecting their campus at the edge of Oakland with Pittsburgh Technology Center, Bakery Square, and surrounding neighborhoods.



### **Shuttle Service Schedules**

Route Name	Effective	Service	Schedule1	Schedule2	Schedule3
University of Pittsburgh					
10A Upper Campus	Nov-July	Daily Service	M-F 7:00AM - 3:35AM	Sat 9:45AM - 3:45AM	Sun 9:20AM - 3:45AM
10B Upper Campus	Nov-July	Weekdays	M-F 5:50AM - 2:28AM		
15A OC Lot Shuttle	Nov-July	Weekdays	M-F 6:00AM - 9:58AM / 3:10PM - 7:08PM		
20A N Oakland	Nov-July	Daily Service	M-F 6:55AM - 7:00PM	Sat 5:25PM - 2:50AM	Sun 5:25PM - 2:50AM
20B N Oakland	Nov-July	Weekdays	M-F 6:45AM - 7:10PM		
25A Library Resource		Weekdays	M-F 9:00AM - 4:30PM		
30A S Oakland	Nov-July	Weekdays	M-F 5:55AM - 7:10PM		
30B S Oakland	Nov-July	Weekdays	M-F 6:50AM - 7:00PM		
30CS Oakland	Nov-July	Late Nights			
40A Biotech Center	Nov-July	Weekdays	M-F 7:00AM - 7:25PM		
Bridgeside Point II		Weekdays	M, W, Th, F 6:00AM - 7:00PM	Tue 6:00AM - 8:30PM	
The Bridges Residence Hall					
1U North South Loop	Nov-July				

Route Name	Service	Schedule1	Schedule2				
Carnegie Mellon University							
A Route – North Oakland, Lower Shadyside	Weekdays	M-F 7:15AM - 10:45AM / 4:30PM - 6:00PM					
B Route - Upper Shadyside	Weekdays	M-F 7:15AM - 6:00PM					
A/B Route - North Oakland, Shadyside	Daily Service	M-F 11:15AM - 4:30PM / 6:30PM - 11:00PM	Sat&Sun 7:15AM - 12:30PM / 1:30PM - 6:45PM / 7:30PM - 11:15PM				
PTC Route – Morewood Gardens Turn around PTC	Daily Service	M-F 7:45AM - 8:45PM	Sat&Sun 8:45AM - 12:15PM / 1:15PM - 5:45PM				
Bakery Square Shuttle (Long Route) – CIC - Bakery Square	Weekdays	M-F 8:30AM - 10:00AM / 4:30PM - 6:00PM					
Bakery Square Shuttle (Short Route) – CIC - Bakery Square	Daily Service	M-F 10:30AM - 1:45PM	Sat&Sun 10:30AM - 1:45PM				



### **Bus and Shuttle Routes**

---- PAAC Bus Routes

#### **CMU SHUTTLE ROUTES**

- A/B Route
- Bakery Square Shuttle (Long Route)
- Bakery Square Shuttle (Short Route)
- PTC Route

#### **UNIVERSITY OF PITTSBURGH SHUTTLES**

- 10A / 10B Upper Campus
- 15A OC Lot Shuttle
- 1U North South Loop
  - 20A / 20B N Oakland
- 25A Library Resource
- 30A / 30B / 30C S Oakland
- 40A Biotech Center
  - Bridgeside Point II
  - The Bridges Residence Hall

Sources: Bus Routes, Stops, and Proposed BRT (2019), Port Authority of Allegheny County; Shuttle Routes (2019), CMU and University of Pittsburgh.



### POINT OF DISCUSSION

There is significant overlap between PAAC routes and the university shuttle routes. How could changes to either system make transportation in Oakland more effective and equitable?

## Most of the off-street parking in Oakland is provided in parking garages and structures.

There are at least 6,300 off-street parking spaces provided in parking structures and lots with access to the public. Parking lots and parking garages that allow public access are clustered near the Fifth and Forbes Corridors and near the hospitals on Terrace and O'Hara Streets.

The institutions – including University of Pittsburgh, UPMC, and Carnegie Mellon together – control most of the off-street parking inventory in Oakland. In its most recent 2010 IMP, CMU reported 2,900 spaces in its garages and lots in Oakland. The parking inventory shared between Pitt and UPMC totals nearly 10,000 spaces in Central Oakland.

There is a major parking lot on Second Avenue served by Pitt/UPMC shuttle service, part of a strategy to enhance park 'n' ride services and develop intercept parking outside of the core of Oakland.

In interviews, UPMC staff reported that increasing outpatient services in Oakland is increasing demand for patient parking during the day.

Institutional parking largely serves employees, with limited spaces set aside for visitors and patients. Demand for parking permits far exceeds supply, with the most desirable locations featuring waitlists of 10 years.

Pitt identifies a potential loss of 2,000 parking spaces in its most recent IMP. Pitt plans to pursue Transportation Demand Management (TDM) strategies to mitigate this loss and ensure that they right-size their parking supply in the future.

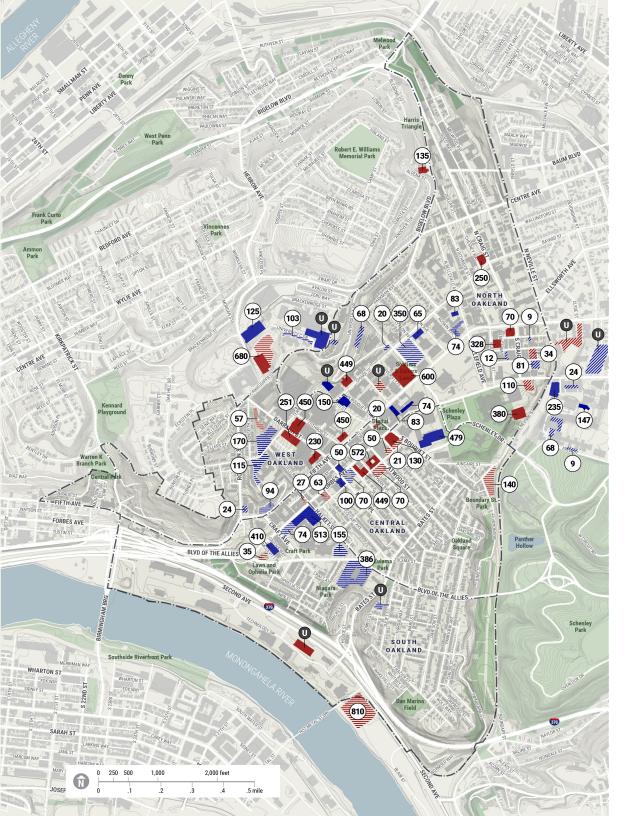
Transportation Demand Management (TDM) is a program of information, encouragement and incentives to help people know about and use all their transportation options to optimize all modes in the system – and to the need for parking and congested traffic. The Oakland Transportation Management Association helps administer TDM in Oakland, working with employers, businesses, community organizations, local government agencies, and regional transportation planners and providers.

In high-demand locations near the Fifth and Forbes Corridors and the hospitals, there is some leasing of off-street residential parking spots to employees, as indicated in interviews and in ads on peer-to-peer marketplaces. This reflects the high demand for employee parking in Oakland and the regulation of on-street parking.

Improved wayfinding to and from public access parking and for pedestrians is a goal of existing Oakland Plans. Institutional Master Plans for CMU and UPMC and the Innovation Oakland Plan all cite the need to improve wayfinding to make public parking easier to access and use in Oakland and encourage easy transitions to and from other modes of travel



Wayfinding should be oriented towards key routes of travel —including cyclists as well as pedestrians, vehicles, transit, and vehicles. Cyclist wayfinding in London helps show preferred travel routes.



### **Parking**

### **PUBLIC ACCESS**

**////** Surface Parking Lot

Parking Garage

### LIMITED ACCESS

Surface Parking Lot

Parking Garage

- Mumber of Parking Spaces
- Unknown/UnpublishedNumber of Parking Spaces

**Note:** Some parking structures or lots did not have publicly available space counts, and not shown with a total but are shown in location and type.

Sources: Parcels (2019), Parking (2019), Land Use Data (2019), Allegheny County. Institutional parking from Carnegie Mellon University (2012), Carlow University (2017), University of Pittsburgh (2019), UPMC Magee (2011), and UPMC Oakland (2014) Master Plans, Additional data from Parkopedia ad OTMA.

Almost every street in Oakland has managed parking as part of the residential parking permit zone, on-street meters, special permit areas, or no parking allowed areas.

Large sections of Central and South Oakland are covered by the residential parking permit program. A residential permit costs \$20 annually. There is currently no limit to how many permits a household can use.

Oakland has 1,576 metered public onstreet parking spaces, more than any other neighborhood in the city. This number includes the parking spaces in Schenley Park, which the Parking Authority includes in the Oakland total. Parking costs \$3.00/hour in Oakland; downtown has higher rates. There are an additional 48 metered parking spaces on Technology Drive.

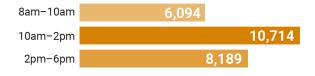
The Pittsburgh Parking Authority estimates that on-street parking is most heavily utilized near UPMC, and that there are more transactions during the weekday.

### On-Street Parking PARKING TYPE



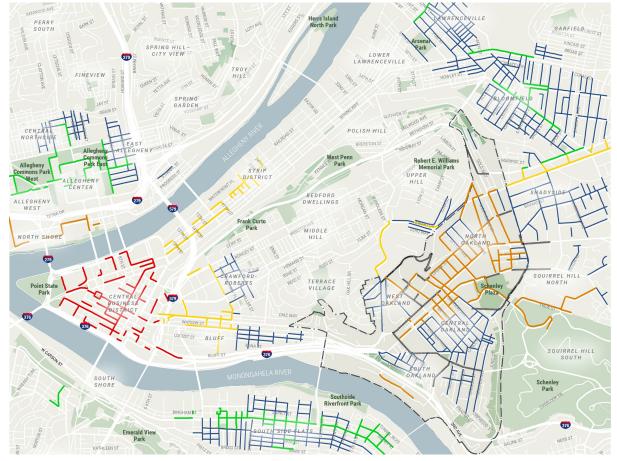
Sources: Parks (2017) and Slopes (2018), City of Pittsburgh; Parcels (2019), Parking (2019), Pittsburgh Boundary (2019), Rivers (2015), Streets (2017), Land Use Date (2019), Allegheny County, Institutional parking from Carnegie Mellon University (2012), Carlow University (2017), University of Pittburgh (2019), UPMC Magee (2011), and UPMC Oakland (2014) Master Plans.

### Number of Transactions in Oakland, Sample Weekday



### Parking Payments in Oakland, Sample Weekday







### **On-Street Parking**

### **PARKING TYPE**

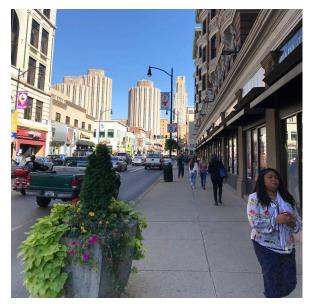
- Metered Public On-Street Parking
- ---- Residential Permit
- Special Permit
- Parking Not Permitted

### Parking Pay Station

Sources: Parking (2019), Pittsburgh Parking Authority. Institutional parking from Carnegie Mellon University (2012), Carlow University (2017), University of Pittsburgh (2019), UPMC Magee (2011), and UPMC Oakland (2014) Master Plans.

## Oakland has high levels of pedestrian activity, but lacks appropriate facilities in many locations.

Existing sidewalks, particularly in neighborhood areas, are narrow and compete for space with street trees and utility poles. Property owners are responsible for maintaining sidewalks adjacent to their property. Additional information on sidewalks and surrounding environments can be found on page 101, Oakland Street Character Typology.



Sidewalks on Forbes Avenue are wider than in most of Oakland, but still can be congested at times. Recent streetscape projects by OBID have installed planters and additional street furniture.

### There are 26 sets of public steps in Oakland, ranging in length from 5 steps to 157 steps.

Due its steeply-sloping topography and historic development patterns, Pittsburgh has more public steps than any other city in the United States; there are more than 800 total sets of steps across the city. Most of these public steps were constructed in the 1940s and help provide pedestrian connections across the steep slopes of Oakland to other sections of the neighborhood, transportation, and other amenities. Over the last few decades many of these steps, in Oakland and the City at large, have deteriorated and require maintenance.

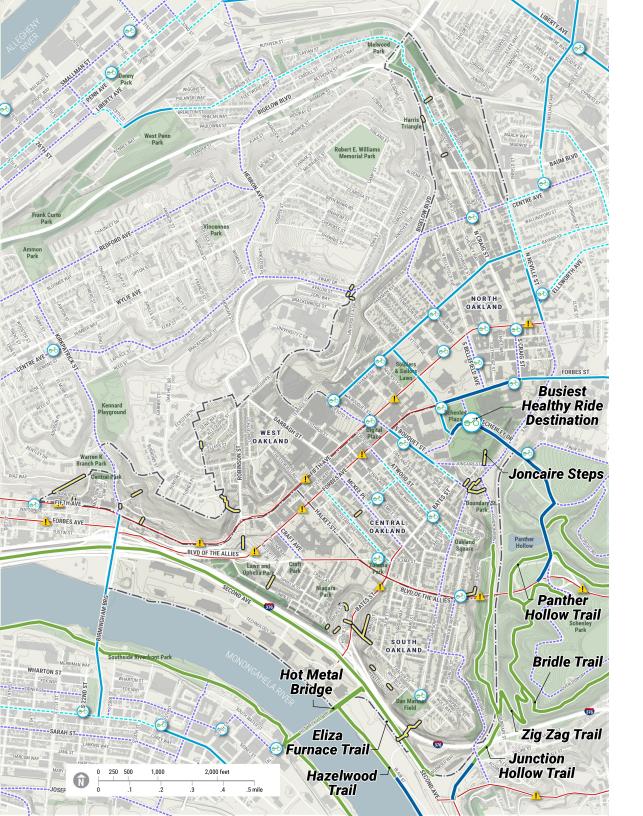


Narrow sidewalks, obstacles including poles and signs, and poor maintenance limits the accessibility of many sidewalks in Oakland.

In 2017, the City of Pittsburgh conducted a planning analysis to evaluate public steps for their usefulness to the City's pedestrian network and contributions to community urban design. Steps evaluated and scored in Oakland, shown on the map on page following page, include:

- North Oakland: Cluster of three staircases connecting University Drive, Allequippa Street, and Iowa Street
- Central Oakland: Louisa Street from Coltart Avenue to McKee Place, Diulus Way from Boundary Street to Bouquet Street, and Boulevard of the Allies from Parkview Avenue to Juno Street
- South Oakland:
  - A group of staircases near Bates Street, including Romeo Street from Frazier Street to Cato Street, Frazier from Bates Street, and other smaller sections
  - The Joncaire Steps a set of 136 steps traveling 216 feet from Joncaire Street up to the Frick Art Museum – were rebuilt in 2018 with new lighting, newly planted trees, railings, and durable concrete steps.

These stairs are an important pedestrian amenity and destination for exercise. The new stairs include a runnel, a ramp that runs alongside the steps and allows cyclists to easily push their bicycle up or down the stairs while they walk up them. This connection helps link the protected bike infrastructure along Schenley Drive to Boundary Street and the Junction Hollow Trail.

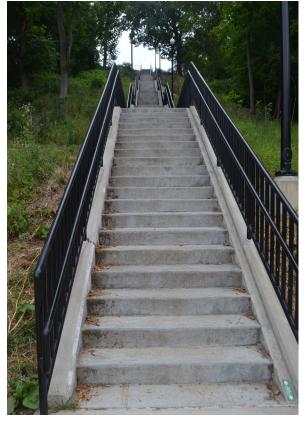


### Bicycle and Pedestrian Infrastructure

- Trails—off-street trail that allows bicycles
- Protected Bike Lane—bike lane protected bollards, buffer, planters, etc.
- Bike Lane—painted on-street bike lane
- Sharrows—on-street arrows showing where bicycles should be on the road
- On-Street Bike Route—route that can be biked, may or may not have infrastructure
- Bikeable Sidewalk—bicycling allowed on sidewalk (i.e., on bridges)
- —1— Cautionary Bike Route—route that may be dangerous, difficult to avoid
- Public Steps
- Healthy Ride Stations

Source: Bike Share Stations (2019), Healthy Ride; Bike Lanes (2019), Bike PGH.

Additional information about public steps can be found at https://pittsburghpa.gov/citysteps/. There are also other sets of steps, including ruins of steps, that were not included in the analysis because of their condition, limited usefulness, or location.



The rebuilt Joncaire Steps include a runnel for bikes and new lighting.

## Oakland borders the junction of two expanding trail networks – Schenley Park and the Riverfront.

Once accessed, the trail system provides safe connections to Downtown, Southside, and other neighborhoods. The Junction Hollow Trail provides access from Boundary Street to both of these systems. The riverfront trails – including the Eliza Furnace Trail and Three Rivers Heritage Trail – provide strong connections to downtown. By crossing the Hot Metal Bridge, the Three Rivers Heritage Trail also provides access to Southside. New trail connections and protected bicycle infrastructure are being constructed in Hazelwood Green, heading upriver from the terminus of the Junction Hollow Trail and providing key connections to future development.

Trail Name	Connects To
Hazelwood Trail	Hazelwood Green
Junction Hollow	Eliza Furnace Trail; Boundary Street
Zig Zag Trail, Bridle Trail, and Panther Hollow Trail	Schenley Park Trail System
Three Rivers Heritage Trail via Eliza Furnace Trail	Downtown
Three Rivers Heritage Trail via Hot Metal Bridge	Southside

### Because of strong community advocacy, Oakland has installed significant new bike infrastructure over the last decade.

### Recently-installed bike infrastructure achieves a key recommendation of the Oakland 2025

**Plan.** Protected bike lanes use posts, parked cars, planters, or other barriers to physically separate bicyclists from other traffic. Because they include a physical barrier, they also help prevent auto traffic from parking, loading, or driving in the bike lane. They can be one-way or two-way and are the safest, most comfortable form of on-street bicycle infrastructure for most riders. State laws currently prevents parking-protected bike infrastructure from being installed in Oakland.

# Despite improvements, there are still significant gaps in Oakland's bicycle network. The high traffic volumes and speeds on Oakland's busiest corridors – Fifth Avenue, Forbes Avenue, Boulevard of the Allies, and Bates Street – means they are designated as cautionary bike routes. These corridors can be dangerous, but because they also host the highest concentrations of uses and destinations can be difficult to avoid.

The proposed BRT project on Fifth Avenue and Forbes Avenue will include additional protected bike infrastructure. DOMI will soon release the Bike(+) Plan, the first citywide bike plan in 20 years and a Pedestrian Safety Action Plan to guide investment in pedestrian and bicycle infrastructure. As part of the City's complete streets policy, DOMI is also developing Complete

Protected Bike Lanes	Connects	Distance	Year Installed
Schenley Drive	Schenley Plaza to Anderson Playground	1.40 miles	2014
Forbes Avenue	Bigelow Street to Craig Street	0.50 miles	2017
Blair River Road	Hazelwood Trail to Hazelwood Avenue	1.13 miles	2019

Bike Lanes	Connects	Distance	Year Installed
Neville Street	Fifth Avenue to near Ellsworth Avenue	0.17 miles	2012
S Bouquet Street	Joncaire Street to Sennott Street	0.18 miles	2013
O'Hara Street to Bayard Street	DeSoto to Morewood Avenue	0.78 miles	2015
Bigelow Boulevard	Parkman Avenue to Roberto Clemente Drive	0.40 miles	2015
Forbes Avenue	Craig to Margaret Morrison	0.62 miles	2019

Streets Design Guidelines for how improvements should be constructed.

Oakland has 18 Healthy Ride bikeshare stations containing 181 bikes for short-term rental. Pricing varies based on 15-min, 30-min, and 60-min rides, although longer rides are possible for higher fees. Two-thirds of the Healthy Ride stations are installed on sidewalks in plazas, parks, and other public spaces, while six are located within the street right-of-way. In the first quarter of 2019, the Healthy Ride station in Schenley Plaza had the greatest number of trips ending there, reflecting its status as a community destination.



Healthy Ride Stations	Number of Bikes	Street or Sidewalk
O'Hara Street and University Place (Soldiers and Sailors Memorial)	21	ST
Schenley Drive at Schenley Plaza (Carnegie Library Main)	19	SW
Boulevard of the Allies & Parkview Avenue	19	SW
Fifth Avenue & S. Bouquet Street	19	SW
Zulema Street & Coltart Avenue	19	SW
Atwood Street & Bates Street	14	ST
Fifth Avenue & S. Dithridge Street	8	SW
Schenley Drive & Forbes Avenue (Schenley Plaza)	7	SW
S. Bouquet Avenue & Sennott Street	6	SW
Tennyson Avenue & Fifth Avenue	6	ST
Ruskin Avenue & Bigelow Boulevard	6	ST
S. Craig Street & 5th Avenue	6	SW
Centre Avenue & N. Craig Street	6	SW
Frazier Street & Dawson Street	5	SW
Semple Street & Louisa Street	5	ST
O'Hara Street & DeSoto Street	5	ST
S. Bellefield Avenue & Filmore Street	5	SW
Forbes Avenue & S. Craig Street	5	SW