Interns may join one of the following Teams:

- Bicycle & Pedestrian Program: Planning, Data, & Design
- <u>Capital Finance Planning</u>
- <u>Complete Streets Paving & Sidewalks</u>
- Parking & Mobility Division
- Planning & Project Development
- <u>Right-of-Way Inspections</u>
- <u>Traffic Engineering</u>

Team Descriptions and Work Plans

Bicycle & Pedestrian Program: Planning, Data, & Design

Interns in the Bicycle & Pedestrian Program have a wide range of opportunities implementing the City of Oakland's Bicycle Plan and Pedestrian Plan plus supporting OakDOT with data management and analysis. The Program has three intern areas: planning, data, and design. Interns with broad interests and skills may work in multiple areas. Interns in the planning area contribute to bicyclist and pedestrian projects through GIS analysis (ArcGIS), fieldwork, community outreach, and graphic design (Illustrator). Data interns focus on GIS and databases to create, maintain, and improve important datasets on physical assets (e.g., traffic signals, speed humps, crosswalks) and traffic operations (e.g., traffic volumes, crashes, regulations). Design interns develop plans (AutoCAD), conduct fieldwork, and create photosimulations for bicyclist and pedestrian projects.

Competitive candidates will have experience with ArcGIS or AutoCAD as well as strong skills in problemsolving and standard office applications. Successful candidates are expected to work at least 15 hours per week during the school year and may work up to full-time during breaks. Candidates are encouraged to pursue and plan for internships of at least eight months (and up to two years) to realize fully the opportunities for contributing to complex projects.

See <u>www.oaklandbikes.info</u> for additional information on the Bicycle & Pedestrian Program. Past interns have made core contributions to projects including the <u>CityRacks Bicycle Parking Program</u>; <u>Bicycle Guide</u> <u>Signage Program</u>; the design and production of Oakland's <u>annual bikeways map</u>; a <u>socioeconomic</u> <u>analysis</u> to inform OakDOT's equity-driven work; the development of <u>design guidelines</u>; prototyping for a project with <u>protected intersections</u>; the development of <u>bicycle parking requirements</u> for new development; <u>community outreach</u> for neighborhood traffic safety improvements; and supporting the <u>Paint the Town Program</u>.

Planning Intern: The planning intern in the Bicycle & Pedestrian Program has numerous opportunities to contribute to the implementation of Oakland's Pedestrian Plan and Bicycle Plan based on their skills and interests. Opportunities include hands-on work in supporting the installation of bicycle parking and signage, along with data management and mapping to track these and other assets. Opportunities also include project-specific community outreach, communications for citywide efforts, supporting the City's Bicyclist & Advisory Commission, and graphic design for these work areas. There are additional opportunities with the Paint the Town street mural program and with OakDOT's efforts to develop permanent Slow Streets.

Data Intern: This internship in the Bicycle & Pedestrian Program will contribute to ongoing work on data creation and maintenance for specific GIS datasets with established workflows. The intern will help maintain established data and populate the required attributes for key datasets. The intern will also assist in performing minor refinements to existing data. The intern is expected to play a role in the initial phase of data validation. Work will include researching and identifying relevant raw data and documents to support the creation of GIS data on physical infrastructure to be used by various DOT programs. Examples of such datasets include crosswalks, medians, pedestrian safety islands, bus boarding islands, traffic volumes, speed bumps, face-of-curb, etc.

Design Intern: The design intern in the Bicycle & Pedestrian Program will work with a team of transportation engineers and planners, supporting the design and implementation of bicycle and pedestrian infrastructure improvements. The Design Intern will contribute to citywide bikeway striping projects and Permanent Slow Streets neighborhood activation/traffic-calming projects, as well as help develop the City's growing library of standard Design Details for active transportation improvements. Typical duties include using AutoCAD to complete roadway striping construction plans, developing engineering cost estimates for roadway striping and other improvements, collecting measurements and information in the field, and applying collected information, design guidelines, and engineering best practices to bicycle & pedestrian infrastructure designs.

Capital Finance Planning

Interns will support the OakDOT Funding Program with policy, budget, and planning analysis in the management and implementation of the department's Capital Improvement Plan (CIP). Interns will gain exposure to the entire municipal funding process, including project scoping, grant applications, and project tracking and implementation. Competitive candidates will have a strong interest in public administration, transportation finance, interdepartmental/Citywide planning, and community engagement. Potential projects include Capital Improvement Program (CIP) development, program support for Howard Terminal, grant writing support for the Active Transportation Program, Affordable Housing and Sustainable Communities grant program and One Bay Area Grant, data mapping and visualization, etc.

Typical duties may include, but are not limited to:

- Analyze project financial data to make recommendations on how to organize and program future capital resources
- Develop outreach campaign strategies and collateral material for communicating the CIP
- Assist in all ongoing grant application processes through independent research, writing, and interdepartmental communication
- Work with project implementation staff and fiscal staff to track CIP progress
- Liaise with local oversight agencies to track project progress, ensuring full compliance with County, State, and Federal funding requirements

Complete Streets Paving & Sidewalks

The Complete Streets Paving & Sidewalks (CSP) team plans, designs, and delivers paving, sidewalks, and curb ramp improvements, guided by an equity lens.

CSP is seeking to fill both planning/data analysis intern and engineering intern positions. Interns supporting CSP will gain deep experience in complete streets project implementation, public reporting and accountability, and engineering standards and practices amid the operational volume of OakDOT's largest capital programs. Candidates are expected to work full-time during Summer and Winter breaks and approximately 15 hours per week during the school year.

The Planning/Data Intern will support the section's data management and administration, including but not limited to gathering and preparing data for bi-annual paving memos, gathering and preparing data for curb ramp and sidewalk program reports, and drafting annual reports. Additional tasks may include developing digital reports for program outputs, using dynamic dashboards, maps, etc. to cover paving schedules and progress, curb ramp construction and compliance, and sidewalk capital projects, certifications, and permits. The key work product of this period will be supporting development of new multi-year curb ramp and sidewalk Citywide plans.

The Engineering Intern will support the section's engineering tasks, including but not limited to learning CAD, preparing base maps, supporting in standard detail updating, performing field work (such as for evaluating paving treatment, sidewalk inspection, and curb ramp compliance), and learning how to prepare estimates.

Parking & Mobility Division

With increasing demand for curb space and the rise of new mobility services like scooter-share and autonomous vehicles, there's never been a greater time to consider parking, mobility services and parking enforcement together. The Parking & Mobility Division is dedicated to efficiently managing the city's parking supply and valuable curb space through programs such as dynamic parking pricing, parking enforcement, electric vehicle charging, and shared mobility programs like car share and bike share. Competitive candidates will have a strong interest in community engagement, program management and data analysis. Intern projects may include, but are not limited, to:

- Innovative parking and transportation demand management strategies: The Parking and Mobility Team recently launched an innovative "Universal Basic Mobility" program that provides \$300 pre-paid debit cards to Oaklanders for buying trips or passes on public transportation (like BART and AC Transit) and shared mobility (bikeshare and e-scooters). In addition, the team is implementing the grant- funded "Demand-Responsive Parking & Mobility Management Initiative" (Park Oakland), which involves adjusting parking pricing to match demand. Tasks may include crafting outreach materials, developing policy, collecting data in the field, contacting employers and creating data sets.
- Zero Emission Vehicle Action Plan Implementation: Gas- and diesel-powered vehicles are now the single largest source of greenhouse gases and air pollution in Oakland. The Zero Emission Vehicle Action Plan, approved by City Council in October 2023, calls for Oakland to equitably transition the City's vehicles to clean fuels like hydrogen and electricity. Tasks involved with implementing the ZEV Plan will involve developing policies, writing grants, GIS analysis, conducting outreach in underserved communities and researching innovative new technologies.

Coordinated Street Furniture Program: The Parking and Mobility Team is developing a coordinated program to manage the installation, maintenance and improvement of street furniture assets throughout the City of Oakland. Assets include bus stops, big belly trashcans, digital information kiosks, and more. Task involved with this project will include, writing grants, analyzing and collecting data on street furniture assets in Oakland, conducting outreach, and researching innovative policies.

Planning Intern #1 will focus on one or two of three major projects in the Parking & Mobility Division; Zero Emission Vehicle (ZEV) Action Plan Implementation, the Universal Basic Mobility Program, and the Coordinated Street Furniture Program. For the ZEV Action Plan Implementation, the intern will track the progress of each action in the Plan, take ownership and lead the implementation with supervisor guidance of 1-3 of the actions, conduct any needed research, analysis, and geospatial mapping needed to work towards ZEV goals. For the Universal Basic Mobility (UBM) program, the intern will assist with outreach of participants (answering participant inquires, participating in in-person outreach) and data analysis. Work for the Coordinated Street Furniture Program will include research on street furniture policies, grant writing, and assisting with the upcoming Request for Proposals (RFP) process to select new contractors.

Planning Intern #2 will support the PMMI project and other parking initiatives. This will involve community outreach and data collection in support of expanding demand responsive parking pricing to all of Downtown Oakland.

Planning & Project Development

The Planning and Project Development Program (PPD) develops long-range and corridor transportation plans; manages outreach, planning and conceptual design for paving projects and other capital projects; and reviews, coordinates, and leverages major development projects to implement the City's plans and strategic priorities. Working closely with both planners and engineers, interns will support inclusive community engagement, contribute to complete streets corridor designs, and support policy research related to development review/coordination. Competitive candidates will have a basic understanding of NACTO street design principles, basic proficiencies with Illustrator/InDesign or other graphics programs, will excel at project storytelling, and/or have fresh ideas for inclusive community engagement. In the past two years, PPD has been deeply involved in the <u>14th Street Safety Project</u>, the <u>East Oakland Mobility</u> <u>Action Plan</u>, the <u>Grand Avenue Complete Streets Paving Project</u>, and the <u>Lakeside Dr/Lake Merritt Blvd</u> <u>Complete Streets Paving Project</u> to name a few.

Typical duties and/or projects may include, but are not limited, to:

- Translate street design ideas into public-facing collateral
- Assess multimodal existing conditions to inform project development, including surveys, counts, demographic analyses, and network analyses
- Develop outreach campaign strategies and collateral material
- Support planning efforts, including research, conducting in-person public outreach, and analysis as needed

The Planning Intern would primarily be focused on outreach and project support for Paving coordination projects including the Grand Avenue, MLK, Telegraph, Seminary, and Foothill Paving Projects. Outreach tasks could involve creating public-facing collateral for public outreach, attending outreach events for various projects to represent the project to the public, handing out postcards at public events, coordinating postcard mailings/mail merges, setting up project websites, or creating online surveys. Project support tasks could include conducting traffic or parking counts, drawing up cross-sections in Streetmix, creating project diagrams or illustrative renderings in Illustrator or InDesign, performing field measurements/verifications, or conducting other research and analysis as needed.

Right-of-Way Inspections

Inspectors' job is to review the private development and utility project construction against approved drawings, and to perform daily inspections for such projects to ensure compliance with City standards and specifications. Part of our job also is to address service requests where the City receives complaints from the public, track the issue down to identify the responsible party and direct them to fix the issue.

The Engineering Intern's work plan would include processing and prioritizing service requests related to insufficient ROW restoration by utility companies and private developments, specifically on streets with bike lanes and transit lanes. Interns will gain a basic understanding of ROW construction and inspections, shadow inspectors on larger projects, and conduct inspections on smaller projects, as appropriate. The Intern would also review and update City standards and specifications (under the supervision of the Inspection Supervisor), perform data entry of permits and inspection information, conduct data analysis with the goal of improving inspection processes, and conduct inspections for small projects as appropriate. This Intern should have a valid and current driver's license.

Traffic Engineering

The OakDOT traffic engineering group is seeking engineering interns that will support the following programs:

- Neighborhood Traffic Calming Projects
- School Area Traffic Safety Improvements
- Traffic Safety Investigations

Interns will come out with a strong understanding of engineering standards and practices used by local municipalities. The successful candidates are expected to work full time during Summer and Winter breaks and approximately 15 hours per week during the school year. The duration of employment is typically 2 years predicated on concurrent enrollment in an engineering program (preferably Civil Engineering) at an accredited university (preferably local).

Typical duties may include, but are not limited to:

- Draft engineering design plans in AutoCAD including pavement marking and traffic sign layout plans that support traffic safety investigations and school safety improvements
- Review temporary traffic control plans submitted by private contractors
- Collect data in the field including traffic speed, volume, and classification, and geometric roadway conditions
- Analyze engineering data to determine appropriate traffic control
- Write engineering reports

Traffic Engineering Intern (Safe Streets): School Safety

This Traffic Engineering Intern would work with the school safety program. Like the Summer 2022 intern, they would assist with the citywide rollout of 15 MPH school zones, drafting work orders for others to review and approve. They also supported site visits at schools, taking notes and helping to draft work orders in response to school safety requests. It is always preferable to do field work in pairs for safety reasons but two full-time staff is a lot of resources to devote to some types of data collection and having an intern would be very helpful.

Traffic Engineering Intern (Safe Streets): (Public Requests, Speed Bump and Rapid Response) This Traffic Engineering Intern would work with the speed bump and rapid response programs and support Safe Street Division with public request traffic safety investigations. Like the Summer 2022 intern, they would assist with the reviewing speed bump applications for signature and preliminary engineering evaluations, drafting engineering design plans in AutoCAD including pavement marking and traffic sign layout plans for others to review and approve, and help develop and submit work orders to OakDOT field Installation team. They also support site visits, taking notes and helping to draft work orders in response to public safety requests. It is always preferable to do field work in pairs for safety reasons but two full-time staff is a lot of resources to devote to some types of data collection and having an intern would be very helpful.