



CITY OF  
**HAYWARD**  
HEART OF THE BAY

**Public Works Department:  
Engineering and Transportation  
Division**

Jasray Atwal



# About the City of Hayward

- 62.55 square miles
- 145,839 residents
- Comprised of 10 districts
- Includes the Hayward Executive Airport, Amtrak station, two BART stations, Cal State East Bay, and Chabot College



# Public Works Department: Engineering and Transportation

- The job of Public Works include:
  - Planning, constructing, and maintaining Hayward's Public infrastructure
  - Regulating the construction of land related improvements and disposition of solid waste
  - Assisting in the planning of Hayward's growth and development
- Worked in Three Sections:
  - Survey
  - Design
  - Transportation



# Three Sections: Survey, Design, Transportation

- Survey:

- Survey land and plot out data for the Design section to prepare plans
- Retain old plans and records for new and future projects
- Perform surveys during construction to tell contractors where to build new improvements

- Design:

- Responsible for design and construction of public improvements such as sidewalk, pavement, traffic signals, airports, and City structures such as parking lots, schools, and buildings (fire stations, police stations, libraries)
- Serve as project managers and designers
- Oversee a project from preliminary research, complete the project design
- Work alongside an inspector during construction to ensure projects are completed on time, within budget, and within the scope of work.

- Transportation:

- Responsible for all aspects of Hayward's traffic system
- Design traffic signal plans, and traffic cameras for red light violations
- Maintain traffic and street lights and signals
- Perform traffic counts for roads and streets
- Conduct traffic surveys in order to place speed limits, speed humps, and traffic signs
- Review encroachment permit applications, construction plans, and traffic control plans
- Respond to residents complaints or suggestions for new lights, signs or signals, and update an accidents database system and records for each intersection in the City of Hayward



# Experience in the Survey Section



- Helped to find street elevations using surveying equipment
- Was able to find and store Hayward's public infrastructure plans and projects
- Viewed detailed street maps and learned about the process of transforming data from surveying equipment to view on maps and in AutoCAD



# Experience in the Design Section

- Viewed plans and designs for current and past city projects
- Learned and applied AutoCAD software to construct city maps of compliant and non-compliant pedestrian ramps
- Learned about the design and construction process for creation of plans to construction in the field
- Attended a pre-construction meeting with the engineers and contractors for a project
- Went out in the field to see current projects including the Route 238 improvement, as well as the Hayward Executive Airport, and learned about the demolition process and the equipment used



# Experience in the Transportation Section



- Conducted traffic counts and speed surveys
- Set up a traffic counter to take count of the number of cars in 24 hours
- Learned about how traffic signals are maintained and viewed the control system for signals
- Helped to respond to residents complaints or suggestions for the city
- Worked with the city accident database and traffic count data
- Learned about the many different responsibilities that the Transportation section deals with



# What I learned

- Learned a lot about how Hayward is maintained as well the many people and all the work required to make Hayward a better place for its residents
- Able to meet, work, and interact with the people who work for this City and learned so much about how things are maintained, and the different jobs and responsibilities of many people in Hayward's Public Works Department
- Being a resident and going to school in Hayward made this internship even more worthwhile and interesting because I was able to find out what improvements will be made to my high school, neighborhood, and city
- I also learned how important the Engineering and Transportation Division is, not only for the safety and needs of Hayward's residents but also for the growth and prosperity of the City of Hayward.

