PlanCommute

Eugene + Varun

The Problem

- Climate change is a pressing issue
- Typical passenger car emits 4.6 metric tons of CO_2 per year (EPA.gov)
- Cities like Los Angeles have high car volume and suffer from car emissions
- Hybrid and electric vehicles do not emit as much greenhouse gases

The Problem

- Hybrid and electric vehicles are not doing enough
- Impact of manufacturing these new cars
- Contributes to traffic

The Tangential Problem

- Upgrade public transportation infrastructure
- Allow better access across communities
- Improve driving experience

PlanCommute

Offer one-stop tool for people looking to purchase a new car

- Various transportation options
- Cost savings of green vehicles and other transportation
    - Transit
    - Bikes
- Environmental impact score for different options

Alternatives

- Other tools only show either commute options or monetary savings
- PlanCommute offers a holistic view of price, commute options, and environmental impact
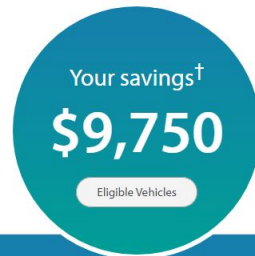
California Clean Vehicle Rebate Program

- Only shows monetary savings
- Perpetuates hybrid/electric vehicle purchasing

Use this tool to determine incentive programs available for the purchase or lease of your clean vehicle

Incentives are based on where you live, the type of vehicle purchased or leased and household income. Also check your local city, county, air district and utility company for rebates that may not be listed here.

Zip Code *	Vehicle Type *	New or Used? *	Scrap/retire a vehicle? *
90007	Plug-in Hybrid (PHEV)	New Vehicle	Yes
California Only	Learn more about eligible vehicle types.		

Utility Provider *	Household Size *	Household Income *
Los Angeles Departmer	4	$79,501 - $106,000
	Include all family and unrelated people who live with you.	The total combined annual income of all people living in your household.

Reset   Calculate

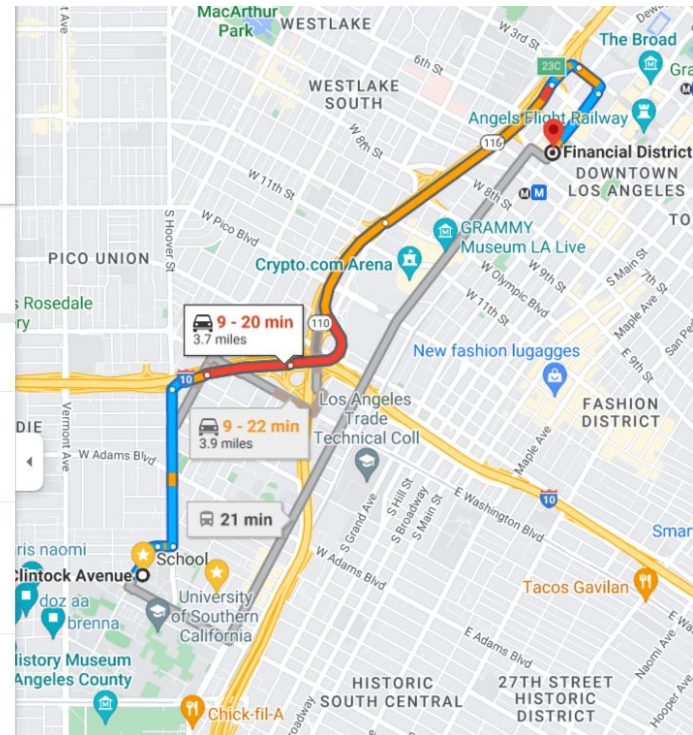You may qualify for the following incentives based upon the information you provided:[†]

Your savings[†]

$9,750

Eligible Vehicles

Google Maps

- Show commute options
- Time estimates

User Feedback

- User feedback from commuting students and professors
- Consider people purchasing family cars
  - Makes more sense to optimize regular use cars
- Liked the variety of methods
- Make the point of the site clearer

Future Scope

- Integrate ride-share estimates after getting approval from Uber or Lyft
- Expand to other cities and integrate local gas and electricity prices

Tech Specs

- Single Page Application
- Server runs on NodeJS
- Front End built on React JS
  - React-Semantic-UI framework for beautification
- Integrate Google Maps API for addresses and route queries
- Constructed EcoScore using
  - Gas Mileage
  - Cost of bringing cars into circulation
  - Public systems used

Demo