Figma: https://www.figma.com/file/Zumeo5uJvobletD9FgWf0H/350?node-id=2%3A8

Point system

Formula:
Stuff we wanna include:
Weekly cost of owned car (mileage * commute distance + mileage * weekend)
Weekly cost of new car ....
Front cost of new car
Cost of lyft/uber for commute

Based on these costs - end up with a net gain/loss per week, number of weeks until break even

Types of mileage are:
- Gas (5)
- Electric (1)
- Hybrid (2)
- Rideshare (4)
- Public Transport (3)

New/Used
- Lose points for new car because its a new car being built

Pure cost:
- New car
  - (mileage * commute distance + mileage * weekend)
  - Front cost (purchase price)
  - Insurance / other fixed costs estimate
  - Gas cost / electricity cost
  - Rebate (if hybrid/electric)
- Continuing to use old car
  - (mileage * commute distance + mileage * weekend)
  - Insurance / other fixed costs estimate
  - Gas cost / electricity cost
- Rideshare
  - Using estimates from google maps
- 2 wheel share (bikes, scooters, etc)
  - Costs from APIs
- Public Transportation
  - Costs from city

Environmental Cost

- New car
    - Convert mileage costs to carbon footprint
    - See carbon cost of creating new car
    - Gas cost / electricity cost → carbon estimate
    - Some estimate cost of old car being demolished, resold, etc
- Continuing old car
    - Convert mileage costs to carbon footprint
    - Gas cost / electricity cost → carbon estimate
- Rideshare
    - Estimate carbon cost from hybrid mileage
- 2 wheel share / public transportation
    - Estimate from mileage

Offer pure monetary cost as a secondary view option
Show environmental cost first
List considerations/statistics under other options (e.g. public transportation 10 times safer than driving, etc)

Generalize beyond cars

- Lots of tools out there to guide car choices already
- Narrowly within scope of personal benefit → doesn't help shift societal benefit as a macro
- https://youtu.be/d8RRE2rDw4k
- Yeah switching to electric is nice, but do you think walking/biking/public transportation is better?

Feedback

- How to outreach our product?
- App for convenience
- Don't want to drive → peace of mind
- Reliability of transit
- Emphasize cost
- Include info about bigger vision → city investments in transit, etc

Gasoline
Gas costs $5 per gallon in LA, vehicle has 24 mpg, cost per mile is $0.208
Hybrid
Gas costs $5 per gallon in LA, vehicle has 40 mpg, cost per mile is $0.125
Electric
Electricity costs $0.25 per kWh in LA, vehicle consumes 33 kWh to travel 100 miles, the cost per mile is about $0.083

Make new hybrid car :

Display:
Eco score
Monthly savings
Yearly savings
# of days rebate pays for gas/electricity
One time tax credit

For other:
Eco score
Time
Daily savings
Monthly savings
Yearly savings

Daily savings:
    Daily cost: Cost per mile * (**daily commute distance**)
    For gas + hybrid + electric
    Daily savings = hybrid - gas AND electric - gas
Monthly savings:
    Monthly cost: Cost per mile * (daily commute mileage * 22 + **misc distance**)
    For gas + hybrid + electric
    Monthly savings = hybrid - gas AND electric - gas
Yearly savings:
    Monthly savings * 12
Tax credit from table lookup
days rebate pays for gas / electricity
    Need Gas + electricity cost
    Cost per day = (hybrid/electric cost / mileage) * (daily commute mileage)
    Rebate / cost per day
Eco:
    Manufacturing cost only if new car
    + (carbon per gallon = 8.9)x Gas consumption = daily commute distance / mileage
    / + (carbon per kwh = 0.5)x Electricity consumption = daily commute distance / mileage
    = total
    N / total

Bike:
    Time
        Driving time

Biking time
Time diff

Daily

Daily cost: 0
Daily saving = daily gas - 0

Monthly * 22

Yearly * 12

Eco:

10

Transit:

Time

Transit time
Time diff

Daily

Daily cost: 1.25 one way, 2.5 roundtrip
Daily saving = daily gas - 2.5

Monthly * 22

Yearly * 12

Eco:

Transit distance roundtrip
Electricity usage = 2 kwh / mi
(carbon per kwh = 0.5)x Transit distance roundtrip * electricity usage
N / total

Bike + Transit:

Time

Transit time
Time diff

Daily

Daily cost: 1.25 one way
Daily saving = daily gas - 1.25

Monthly * 22

Yearly * 12

Eco:

Transit distance one way
Electricity usage = 2 kwh / mi
(carbon per kwh = 0.5)x Transit distance one way / electricity usage
N / total

Need:

Survey:
Mileage gas
Monthly misc distance
Tax Credit

API:
Driving distance
Driving time
Biking time
Transit time
Transit distance

Values
Mileage gas = FROM USER mi/g
Mileage hybrid = 35 mi/g
Mileage electric = 0.33 kwh/mi = 3.03 mi/kwh
Gas price = 5 $ / g
Electricity price = 0.25 $ / kwh
Cost per mile Gas = 5 / 24 = 0.208 $/mi
Cost per mile Hybrid = 5 / 35 = 0.143 $/mi
Cost per mile Electric = 0.25 * 0.33 = 0.083 $/mi
carbon per gallon = 8.9
carbon per kwh = 0.5