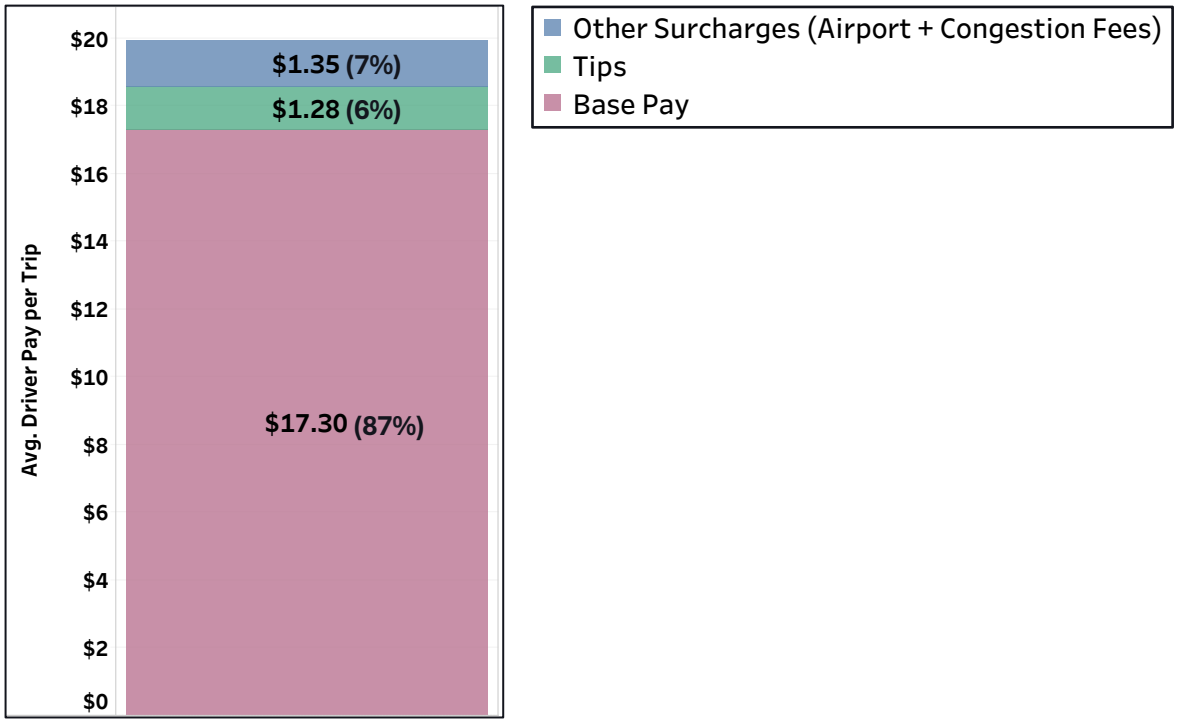
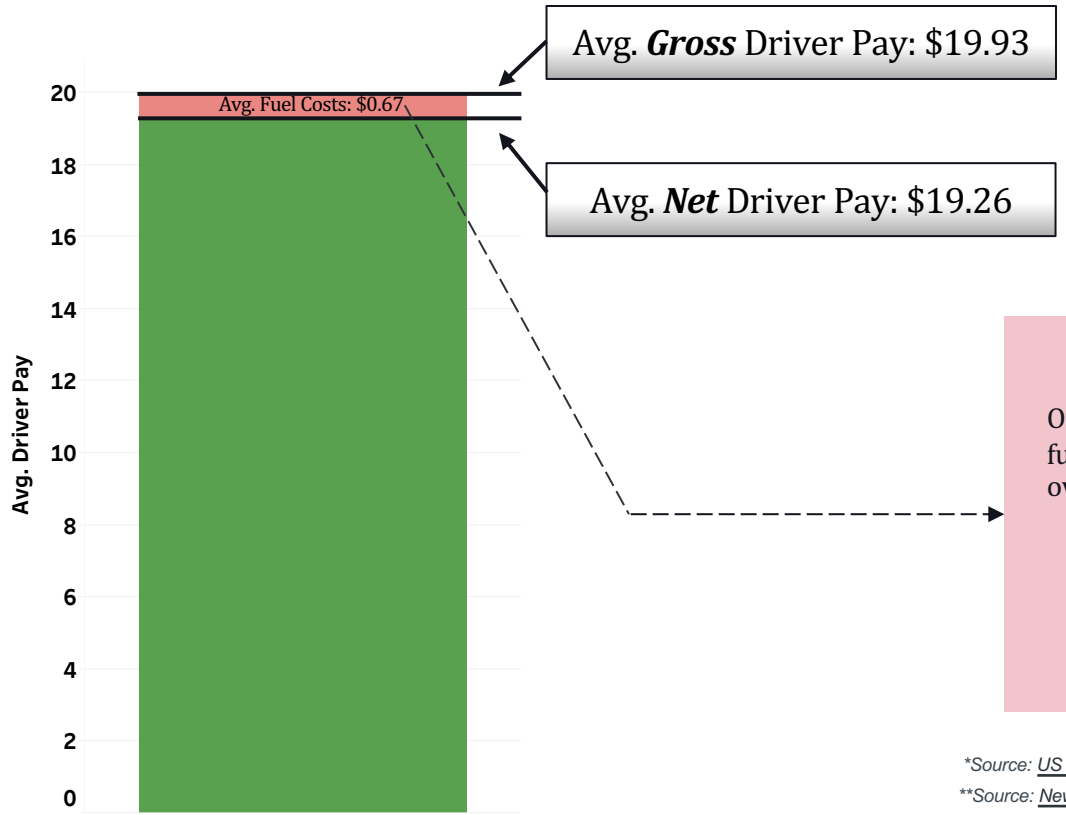
Analysis of Rideshare Driver Pay in NYC – What are the most Profitable Times to Drive?

Sources of Driver Pay

- 13% of Driver Pay comes from surcharges and tips, with the rest coming from the base pay for the ride.



How much do drivers actually earn? Incorporating fuel costs into analysis



Fuel Costs

On average, drivers incur $0.67 in fuel costs per ride, diminishing overall take home pay.

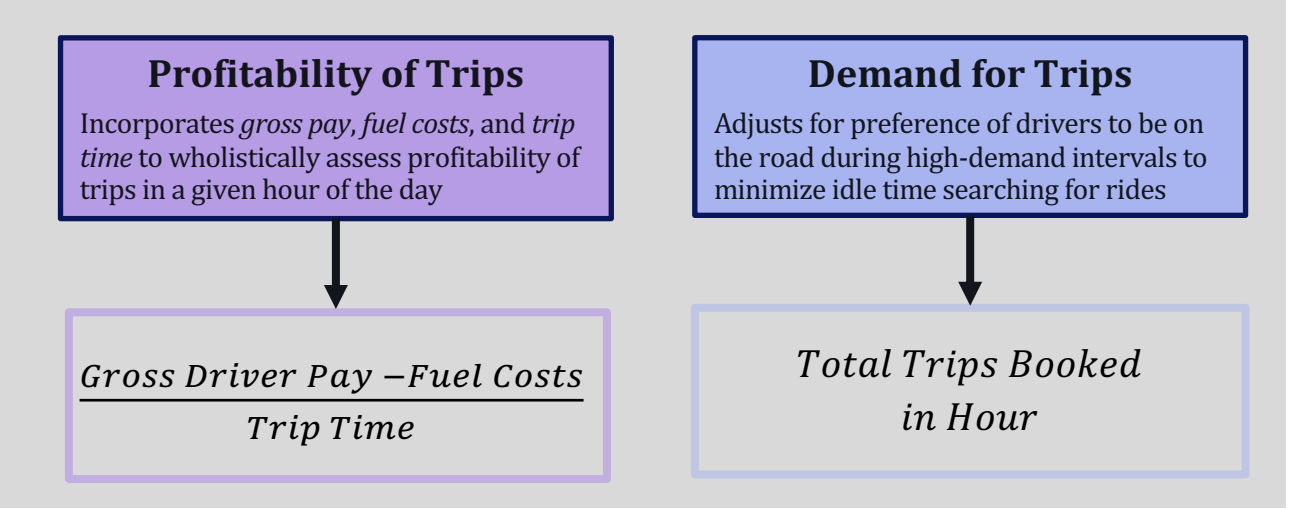
Assumption	Value
Fuel Efficiency	25.5 MPG*
Cost of gas	$3.67/gallon**

*Source: US Department of Energy Alternative Fuels Data Center

**Source: New York State Energy Research and Development Authority

Evaluating driving time attractiveness with *Hourly Profitability Index (HPI)* metric

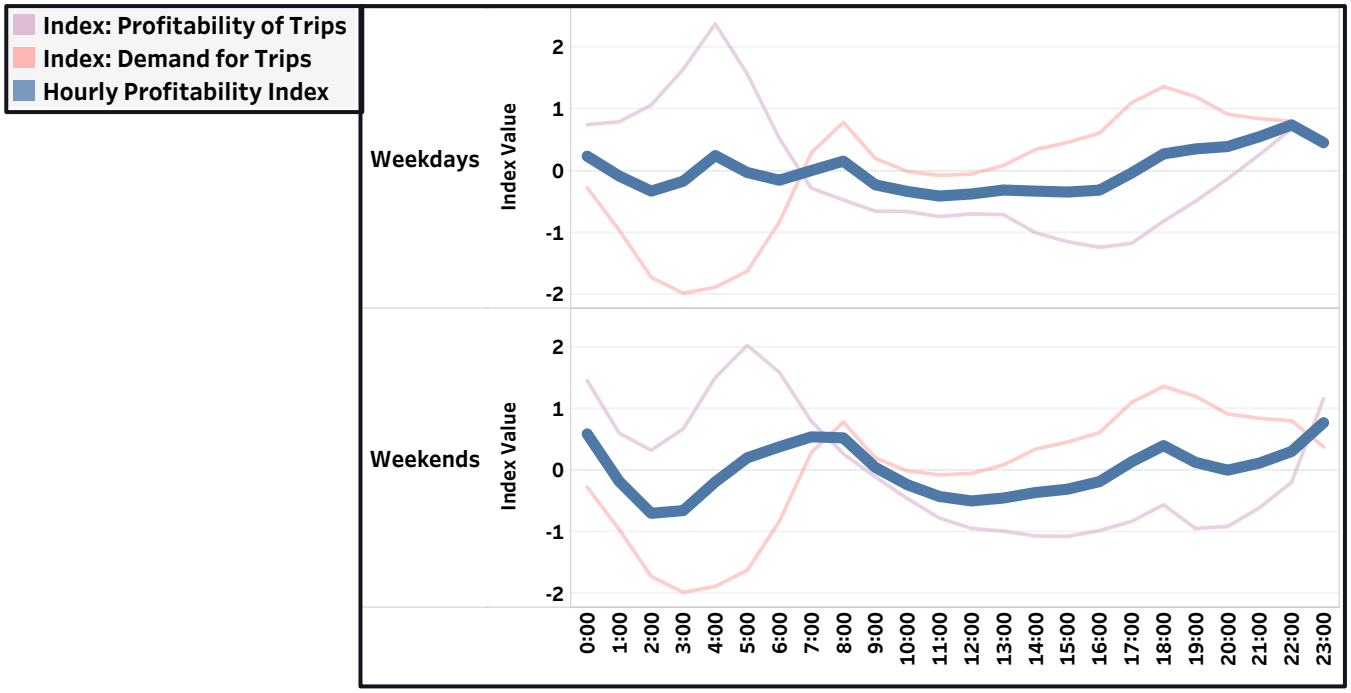
HPI integrates gross pay, fuel costs, trip time, and trip demand to gauge the overall attractiveness of a specific time for drivers.



Profitability and Demand metrics for each time of day are calculated, standardized, and combined to arrive at a value for ***HPI***

Interplay between Profitability and Demand drives variations in *HPI*

High ***Hourly Profitability Index*** indicates more profitable driving times.



Starting around 18:00, Trip Profitability tends to rise while Demand for Trips remains relatively constant, creating a favorable time for driving.

HPI shows greater variation on weekends, indicating the need for more selective driving during these days.

Optimizing for Driving During High *HPI* Periods

Question: If a driver exclusively operates during the 7 most profitable hours, identified by HPI, how much additional Net Income could they generate compared to driving randomly selected hours?

- Note: 7 most profitable hours are from 6 PM to 1 AM

Calculations

Optimize driving time?	Avg. Trip Profit	Assumed % of Idle & Pick-Up Time	Net Income Per Hour	Net Income Per Week	Net Income Per Month
Yes	$19.57	35%	$37.89	$1,516	$6,062
No	$19.00	40%	$34.21	$1,368	$5,474

= assumption

Answer: Considering a 40-hour work week, drivers exclusively operating during the 7 most profitable hours, as determined by HPI, could potentially earn an average of $588 more compared to those driving during randomly selected 7-hour periods.

Details of *Hourly Profitability Index (HPI)* calculation

- ***HPI*** is equally driven by Profitability of Trips and Demand for Trips in its calculation
- Each of these drivers has an index (whose calculation is detailed below) that identifies how profitable or high-demand trips are at a given time of day
- Indices are standardized (via Z-Score calculation) and weighted (with equal weighting of 0.5) and then added together to arrive at ***HPI*** metric