Pay, benefits and working time of gig drivers in New York City and California

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This presentation draws in part from

- Uber's studies, using Uber data: including Hall and Krueger; Hall, Horton and Knoepfle
- Academic study for NYC TLC using industry-wide data: Parrott and Reich
- Studies by transportation consultants: Schaller; Fehr and Peers
- Financial reports: JPMorganChase; MorganStanley; DeutscheBank

And on a new analysis by Koustas, Parrott and Reich, using NYC TLC data on gig drivers and trips, supported by the Sloan Foundation

Preview: Contrasts on driver pay and working time

- Uber and Lyft: Drivers are mainly part-timers who value work schedule flexibility and are satisfied with their pay

- Alternative: Most of the work is done by full-timer drivers who value security and are paid substandard rates

- Since many drivers work for both Uber and Lyft, individual company data give only a partial view

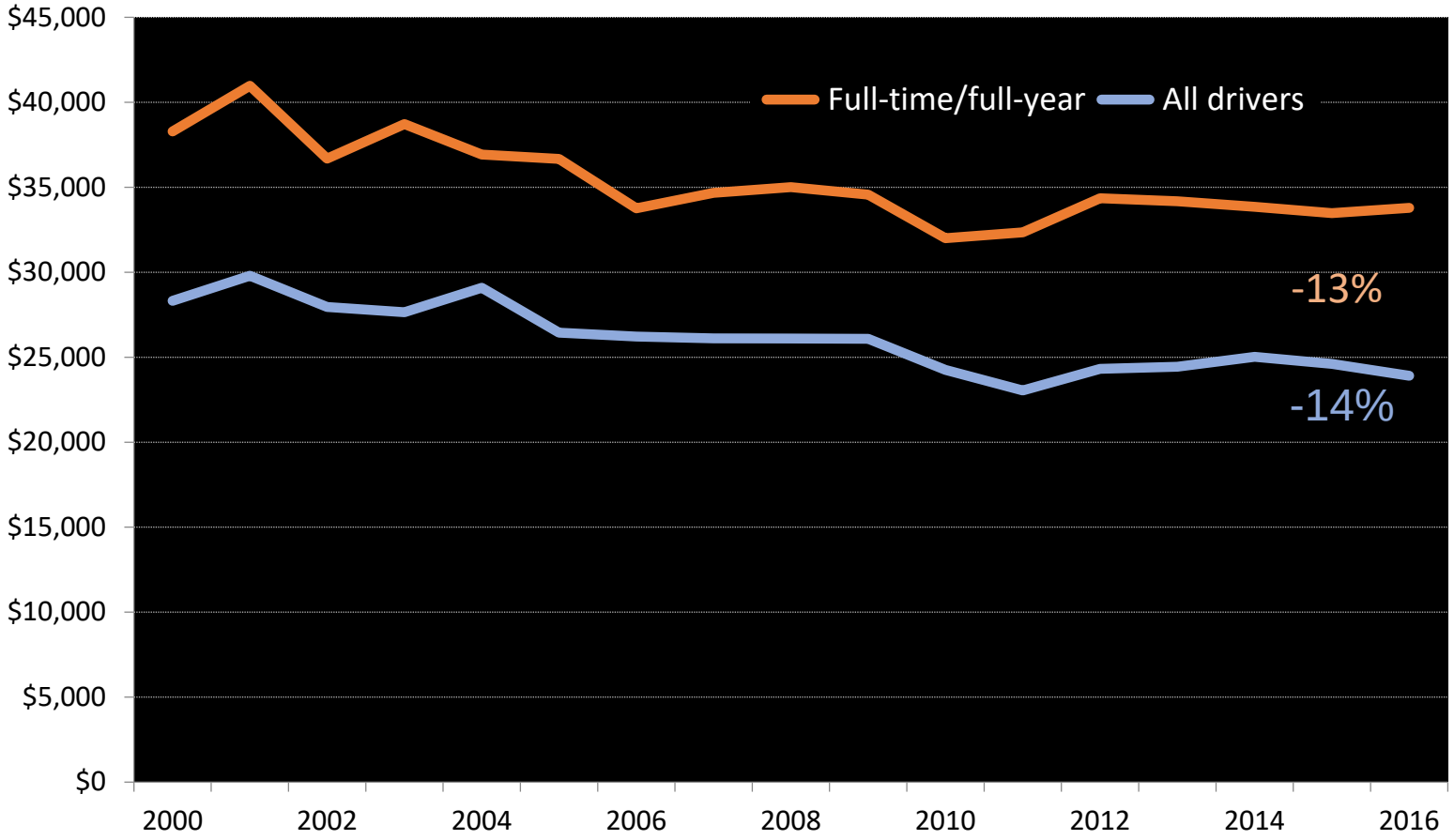
- NYC and national evidence on all the drivers, not from one company:

  --Full-timers do over half, perhaps over two-thirds, of the rides

Policy concerns in this presentation

- What are the industry's pay levels?
- Can they be increased to equivalent of a minimum wage without reductions in service levels?
- Will drivers lose flexibility with a higher pay standard if they are employees?

14 percent decline since 2000 in annual income of taxicab drivers and chauffeurs (U.S.)



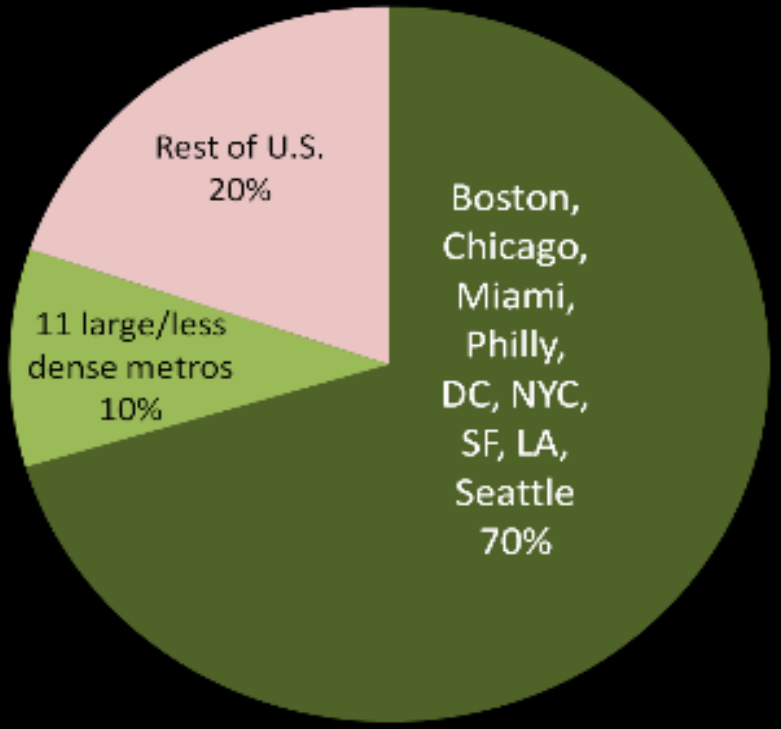
Source: U.S. Census Decennial Census and American Community Survey. Adjusted for inflation.

JPMorgan Chase payments data

- 57 percent of earnings are from drivers in top 10 percent
- This pattern looks like another case of the “80-20” rule

Source: JPMorgan Chase, “The Online Platform Economy in 2018.”
Data are national for 1Q2018

TNC Trips are Concentrated in 9 Big Metros



11 large/less dense metro areas: Baltimore, Dallas, Denver, Detroit, Houston, Milwaukee, Minneapolis, Phoenix, San Antonio, San Diego, and San Jose

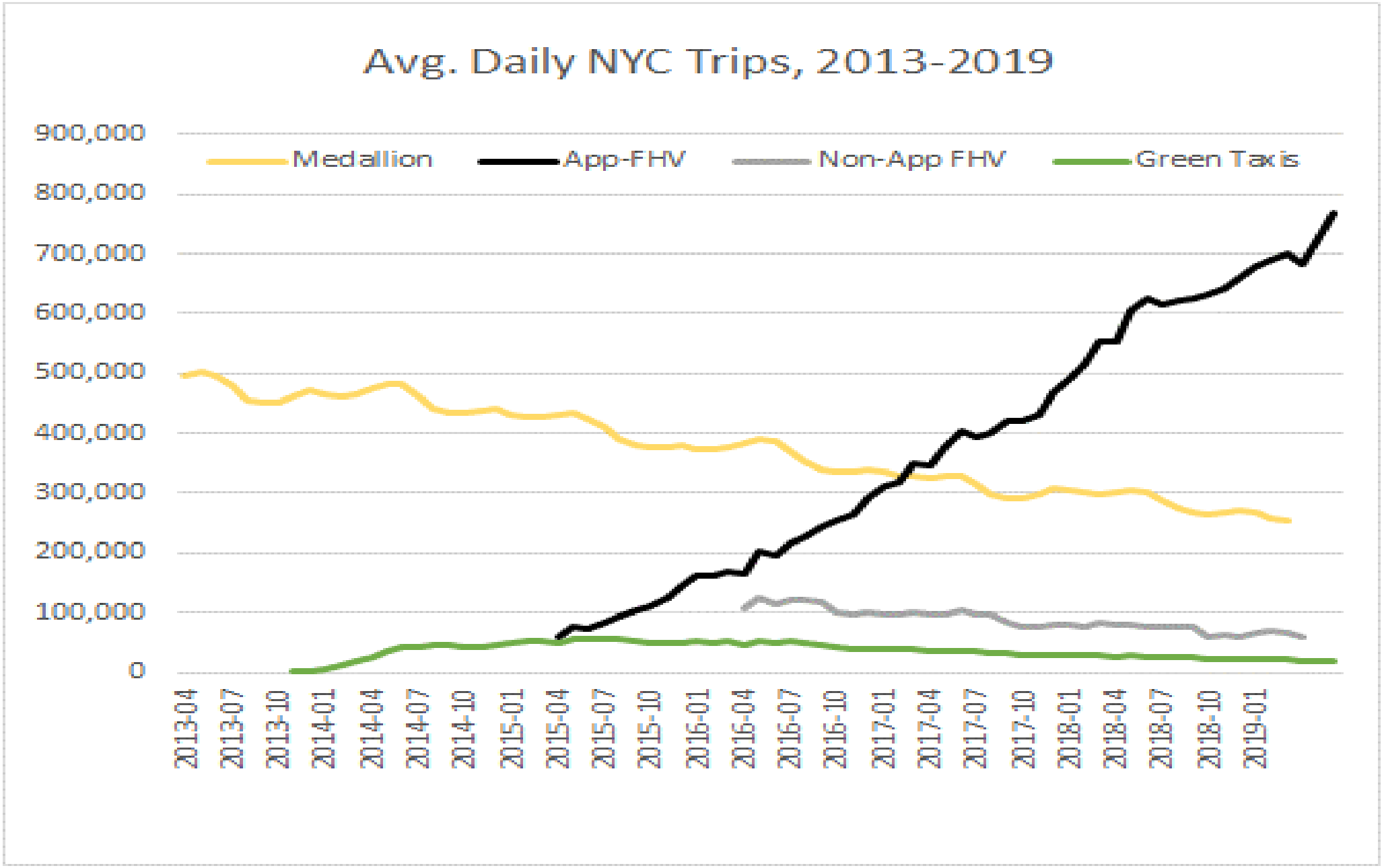
Source: The New Automobility: Lyft, Uber and the Future of American Cities, Schaller Consulting, July 2018.

Outline of rest of this talk

1. **New York City: IC model**
   --Size and structure of gig driver industry
   --Design of a pay and benefits standard for Lyft/Uber drivers
   --How it's worked thus far

2. **CA: converting from an IC to an employee model**
   --Size and structure of gig driver work force
   --Designing a pay and benefits standard for CA gig employees
   --Key concern: pay for wait times (P1)

3. **Tradeoff between flexibility and higher pay standard (security)**


Avg. Daily NYC Trips, 2013-2019
900,000
800,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
Medallion
App-FHV
Non-App FHV
Green Taxis
2013-04
2013-07
2013-10
2014-01
2014-04
2014-07
2014-10
2015-01
2015-04
2015-07
2015-10
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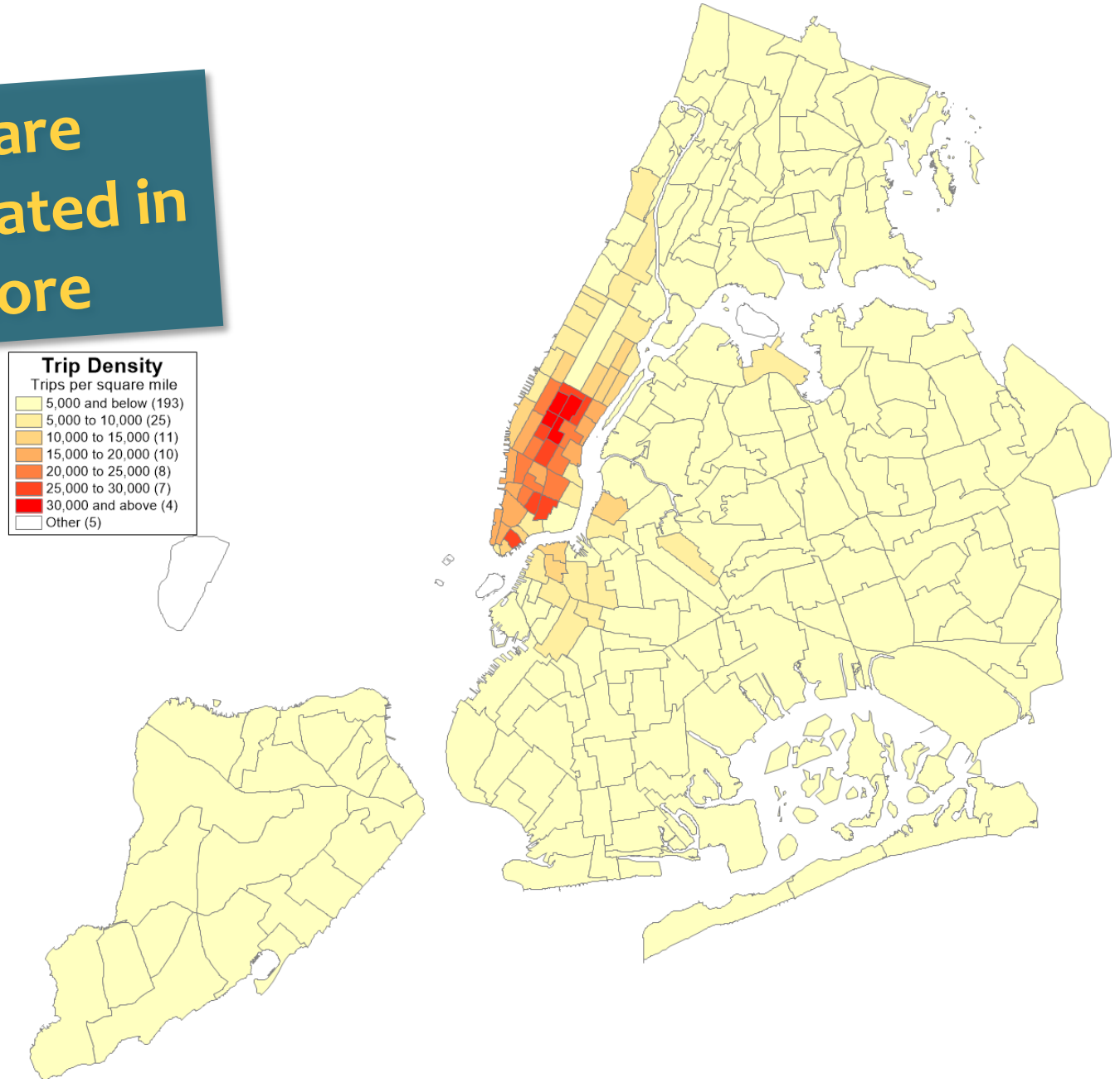
2019-01

Trips are concentrated in city core



Parrott and Reich (2018) report for NYC TLC

- Examined structure of the industry

  --What is actual level of driver pay?

  --Can industry's business model afford to raise substandard levels of pay and benefits?

- Proposed a pay standard equivalent to NYC's $15 minimum wage

  $17.22 to pay for mandatory employer taxes and PTO (90 cents)

- Effects of pay standard on drivers, consumer prices, service availability, passenger wait times, company revenue and profits, and the city economy

NYC drivers (from our 2017 survey)

- Mostly male, immigrant, no college degree
- About half support one or more children
- 40 percent on Medicaid
- 14 percent have no health insurance
- 80 percent acquired their vehicle (loans or leases) mainly for business of driving
- 60-65 percent drive full-time

Our detailed driver expense model

- All licensing, vehicle registration/license/tax and TLC-related requirements
- Cost of acquiring vehicle (purchases or lease), depreciation
- Commercial insurance, fuel, maintenance, cleaning
- Expenses, weighted by vehicle type based on trip shares
- Annual average expenses of $22,100 (63.1 cents/mile, 35,000 miles) vs. IRS business mileage allowance = 58 cents/mile
- 3 percent contribution for worker compensation insurance

Our estimates of pay levels

	Uber	Lyft	Juno	Via	Combined
All trips					
# of trips	2,162,597	628,460	245,131	18,268	3,054,456
Mean gross hourly pay	$ 23.10	$ 23.54	$ 25.27	$ 31.64	$ 23.42
Median gross hourly pay	$ 21.85	$ 22.58	$ 23.34	$ 31.12	$ 22.18
Mean after-expense hourly pay	$ 14.67	$ 14.72	$ 16.88	$ 22.94	$ 14.90
Median after-expense hourly pay	$ 13.56	$ 13.78	$ 14.24	$ 22.48	$ 13.70
Trips below $17.22 minimum					
# of trips below minimum	1,587,482	463,866	171,169	1,672	2,224,189
% of trips below minimum	73.4%	73.8%	69.8%	9.2%	72.8%
Mean gross hourly pay	$ 19.85	$ 20.48	$ 21.84	$ 19.37	$ 20.14
Mean after-expense hourly pay	$ 11.08	$ 11.59	$ 13.12	$ 10.75	$ 11.34
Utilization rate	58%	58%	50%	70%	

* Based on 4th study week, Oct. 16-22, 2017

Labor supply issue for a driver pay standard

- 2018 Uber study (Hall, Horton and Knoepfle):
- Pay increases (caused by price increases) lead to large increases in number of drivers and in driving hours per driver

  (Smaller reduction in number of rides-- inelastic product demand)
- As a result, rides per driver hour fell, and
- Driver pay per hour fell back to its earlier level within eight weeks!

The policy design challenge

- Capping the number of drivers or cars– was not in TLC's power and had been rejected by Mayor's Office

- In an IC model, industry only benefits by having more drivers in the system,

  --Companies do not incur appreciable additional costs

- Challenge: How to create an incentive for companies to limit the number of drivers while maintaining service levels

Driver Pay Standard Applied to a Typical Trip

A typical FHV trip might be 7.5 miles in distance and 30 minutes in time. Here is how the driver minimum pay standard (not the passenger fare) would be calculated under the proposal pay standard (assuming an industry-wide average utilization of 58%):

$$\frac{(.580 * 7.5 \text{ miles})}{.58 \text{ utilization}} + \frac{(\$0.287 * 30 \text{ minutes})}{.58 \text{ utilization}} = \$22.34$$

Note: this is the minimum pay standard (for a non-shared ride)*, not the passenger fare, and the company and the driver can always agree that driver pay for any trip should be higher.*

The driver pay standard ensures that the driver can cover vehicle expenses as well as get paid at least the independent contractor equivalent of $15.00 an hour.

Pay formula incentivizes companies to raise utilization

- Average company-wide utilization rate for both Uber and Lyft was .58
- This rate will be re-measured for each company-- every six months
- The new rates are then inserted in the denominator
- How companies can increase utilization:
  -- restrict inflow of new drivers into their systems, or
  -- limit number who can be on app during non-peak hours

This incentive is powerful

- If utilization becomes > .58, companies then pay drivers less per trip
- Drivers' rides/hour will then increase enough to still increase driver pay *per hour*
- This pay formula thus better aligns the interests of the company with interests of the drivers

[Also reduces congestion and greenhouse gas emissions from cruising cars]

Our projections

- Total gross driver pay would increase by 20.7 percent

- For affected drivers, mean gross pay (hourly) would rise from $22.35 to $27.86 (+ 24.7 percent)

- Companies would absorb increased costs by combination of

  --Utilization rate increases

  --Commission reductions

  --Modest fare increases (< 5 percent)

- Very slight (15 seconds) increase in passenger wait times

Pay standard effects Feb-June 2019

- Pay rose $50 million per month, close to our predictions
- Fares after discounts:
  --fell (25 percent) before IPOs
  -- increased since IPOs (30 percent),
  --so little net change so far

- Companies halted on-boarding of new drivers in April

- Trips continued to increase—at slightly lower rate

- Passenger wait times have not changed

- Utilization rates have increased

Despite August cap on new vehicles and February $2.75 per trip congestion fee

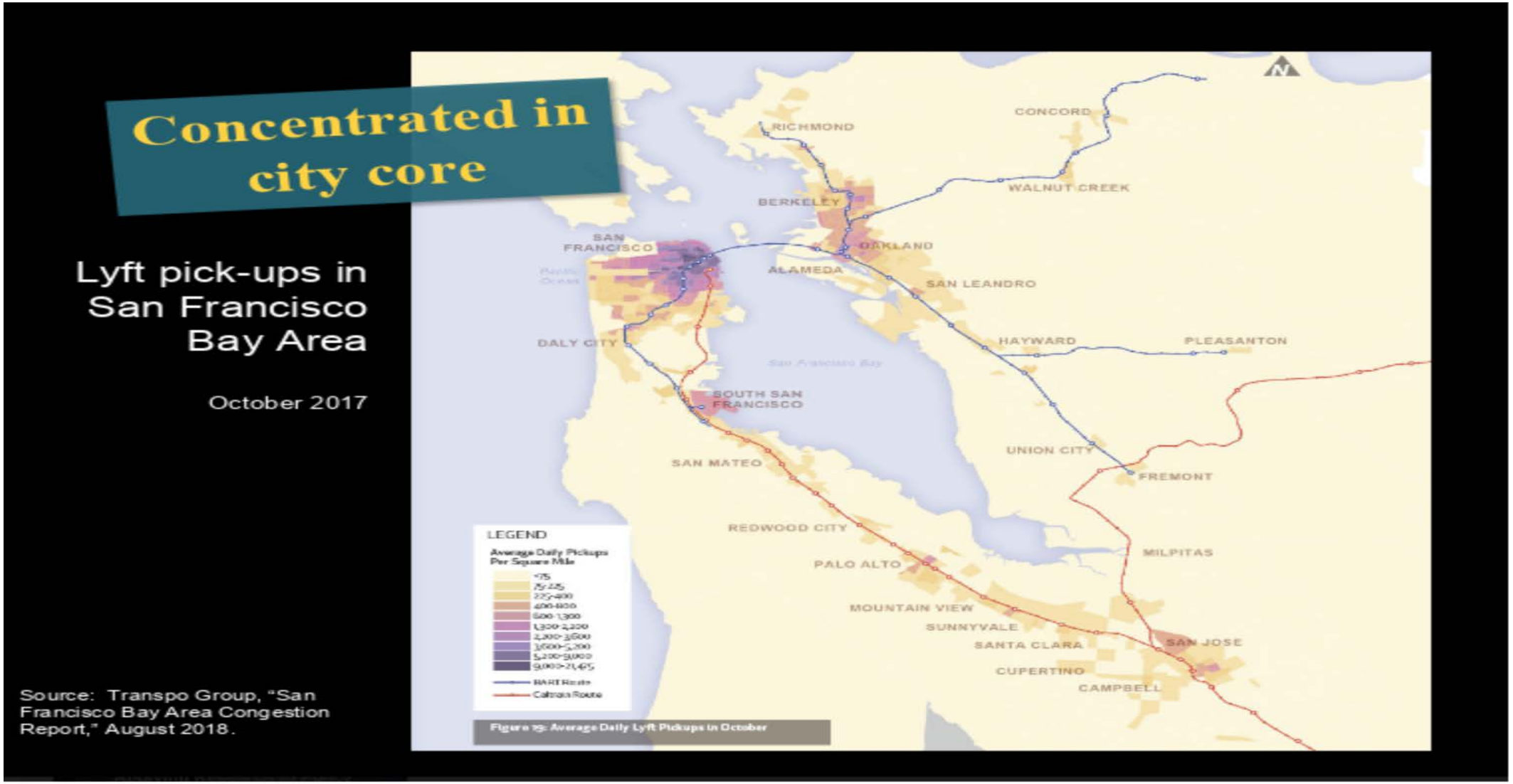
New NYC regulations, effective Feb. 2020

- In core Manhattan only, companies must increase their utilization rates by 10 percentage points, for example, from .58 to .68
- Enforcement mechanism: heavy fines
- Traffic speeds expected to increase ten percent

California: How many Lyft/Uber drivers?

- Lyft claims 275K drivers in CA
- Uber has approx. 60 percent market share, implying about 400K Uber drivers
- If 40 percent drive for both companies, then Uber+Lyft account for **about 575K distinct drivers**
- Similar as proportion of CA population to number of NYC Uber/Lyft drivers to NYC population
- **The above is guess work, we need better data!**

Trips in metros concentrated in city core



California: Casual, part-time and full-time gig drivers

- **Casual**: < four hours per week or < four weeks per year

  --Uber data (Hall and Krueger): 45 percent work < 10 hours per week for Uber

- **Part-time**: drive 10-20 hours most weeks of the year

  --Lyft: 80 percent of its CA drivers work < 20 hours per week

- **Company-level data** does not reflect drivers who work for both companies!

- **Full-timers** are perhaps one-fourth of all drivers in CA (JPMorganChase) and probably account for 80 percent of all trips

- **These are guesses. We have only very sketchy data on hours and pay. We need better data!**

A pay standard for employee drivers

- **Wage: $15 plus PTO needed for driver health and passenger safety**

- **Benefits**

  --UI and social security contributions, worker compensation, paid sick days, meal and rest times, paid and unpaid family leave

  --These add about 30 percent to labor costs

  --Health insurance: through spouse or Covered California

- **Employer reimbursements for employee business costs**

  --Uber offer: 30 cents per mile for employee business expenses

  --Recall 58 cents per mile federal standard (includes insurance)

- **Wait time (P1) !!!**

Wait time (P1), pick-up time (P2), passenger time (P3)

Table 3: TNC VMT by Phase by Metro Region

Metro Region	P1 VMT (Low)	P1 VMT (High)	P1 VMT (Midpoint)	P2 VMT	P3 VMT
Boston	14,700,000	20,590,000	17,645,000	5,340,000	28,280,000
Chicago	29,700,000	40,800,000	35,250,000	9,080,000	54,600,000
Los Angeles	38,300,000	63,190,000	50,745,000	17,660,000	104,130,000
San Francisco	31,500,000	46,600,000	39,050,000	11,930,000	75,150,000
Seattle	9,700,000	15,600,000	12,650,000	2,880,000	17,550,000
Washington, DC	24,400,000	33,500,000	17,645,000	8,100,000	45,990,000
Average as Percent of Total TNC VMT	***28%***	***37%***	***33%***	***9 - 10%***	***54 - 62%***

(Fehr & Peers)

In LA and SF: P1 = 30-33 percent of total miles (=> higher percentage of total time)!!

Why pay for wait time?

- In CA about 30-33 percent of drivers' total vehicle miles, or at least 40 percent of working time, similar to rate in NYC and other major cities

- NYC standard pays for wait time through utilization factor

- If **not** paid, companies do not face any incentive to reduce driver wait time

  --Unpaid wait time will likely increase, reducing driver pay per working hour, as in Hall, Horton and Knoepfle (2018)

  --Undermines the effect of the pay standard

Flexibility concerns

- NYC policy consistent with driver flexibility on work hours
- To manage new utilization standard, companies have just announced:
  - --Limit on number of drivers in core Manhattan only
  - --Small trade-off between security and flexibility
- California employee status consistent with choosing when to work
  - --Many employees already exercise choice over their work schedules
  - --Deliv example: drivers “bid” each week on shift blocks (2 hours)
  - --Small trade-off between security and flexibility

Summary

- **NYC driver pay standard has worked well thus far**

  --Policy succeeded in increasing utilization rate
  --Consistent with industry's business model
  --Better aligns interests of companies and drivers

- **We need quality data on CA driver pay and work times**

- **Should CA drivers be paid for wait time (P1)?**

  --If not paid, higher pay standard will not succeed!!

- **Security versus flexibility: modest trade-off**