

 **@rmchase**



**EXCESS  
CAPACITY**


## when do you want to reserve your Zipcar?

pick up


30/1/2014  15:00 

return


30/1/2014  16:00 


my time is flexible 

address / location

My Current Location 

cars

All 

low emission cars 

automatic cars

find cars



# PLATFORM FOR PARTICIPATION





## PEER COLLABORATORS:

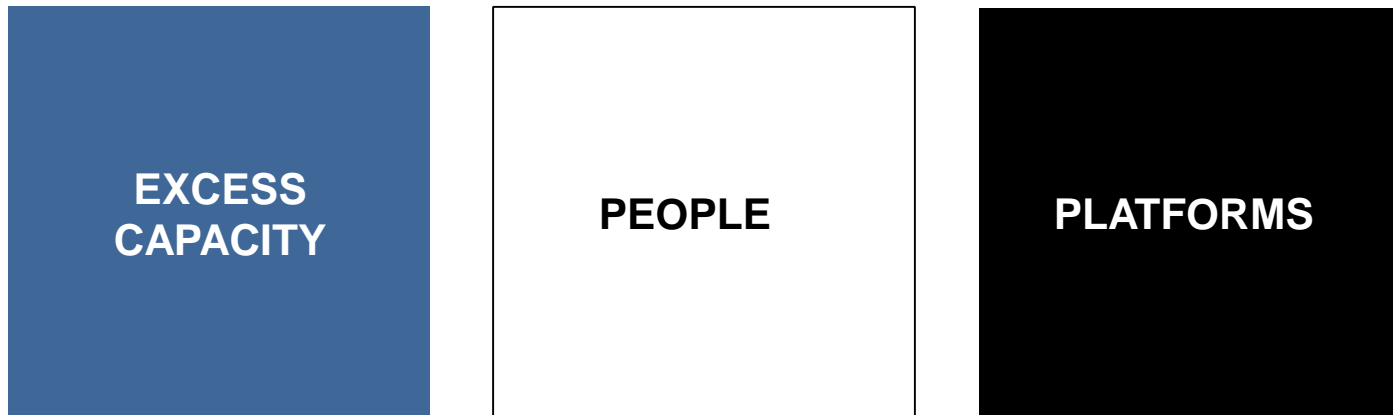
Not consumers but co-creators



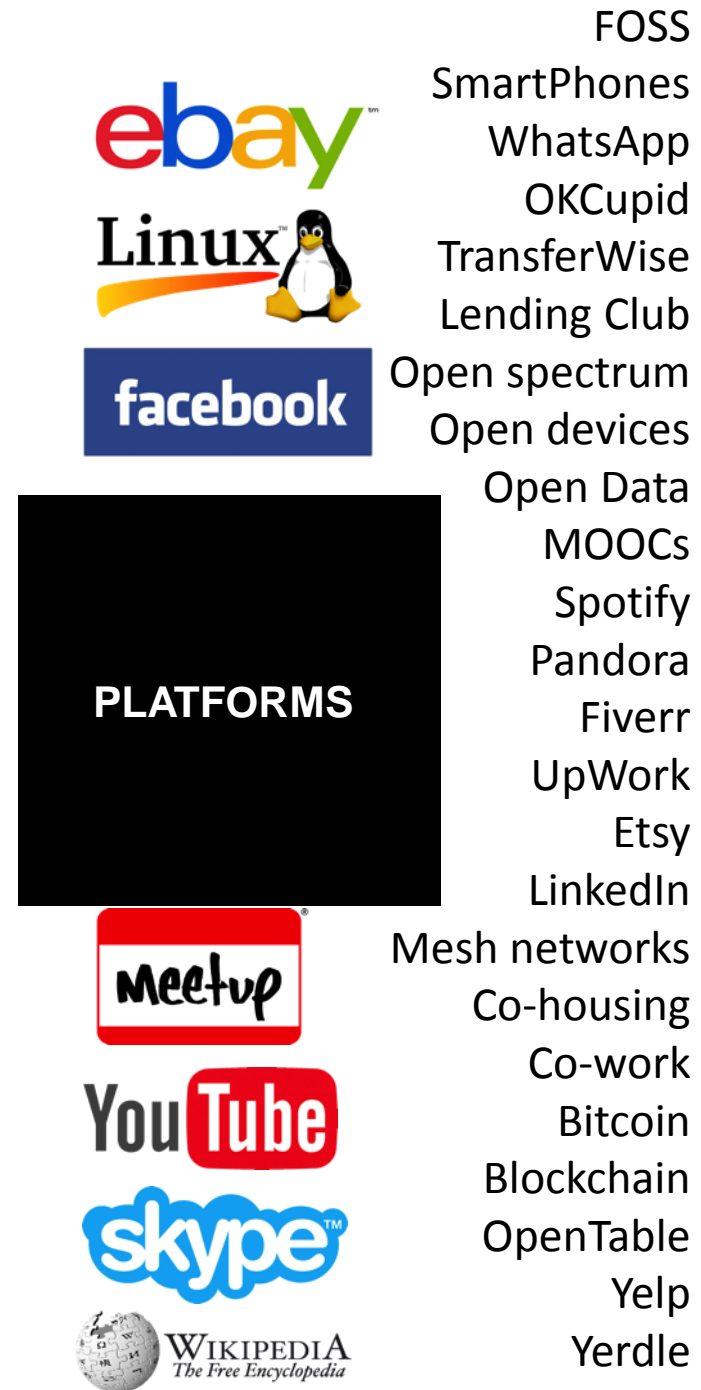
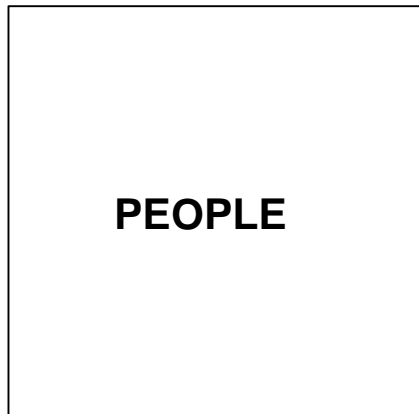


*"Is there a section at the bottom for comments?"*

## PEERS INC



People & Platforms are  
Inventing the Collaborative Economy  
& Re-inventing Capitalism



**BED sharing**





Heater



THE BRADY BUNCH  
MAY 1970



AGE

ROOMS

HOTELS

COUNTRIES



9

2,500,000

207



4

650,000

192



InterContinental Hotels Group

65

645,000

4400

100



Hilton

93

610,000

3800

88



ACCOR

44

530,000

4452

92

AGE

ROOMS

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**65**

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**4400**

**100**



Hilton

**93**

**610,000**

**3800**

**88**



ACCOR

**44**

**530,000**

**4452**

**92**

\$18.75

MARKET VALUE\  
(march 2017)

---



**\$31 B**

---



**\$9.35 B**

---



**\$18.36 B**

---



**\$11 B**



# INDUSTRIAL STRENGTH

(companies, institutions, governments)

Large investments

Multi-year efforts

Integration & Aggregation of many parts

Deep Sector knowledge

Diverse technical expertise(s)

Standard Contracts & standardization

Consistency

Brand Promise (trusted company)

Global

# INDIVIDUAL STRENGTH

(people, local NGOs & local companies)

Small investments

Short-term sporadic efforts

Delivery of small services

Local knowledge

Specific unique expertise/offering

Customization, specialization

Creativity

Personal social networks (trusted individual)

Local

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(people, local NGOs & local companies)

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Local

**DIVERSITY  
of offering**

(companies, institutions, governments)

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Diverse technical expertise(s)  
Standard Contracts & standardization  
Consistency  
Brand Promise (trusted company)  
Global

**PLATFORM  
for participation**

# Excess Capacity

Resource & Cost Efficient



## **Excess Capacity**

Already exists, paid for, more value there

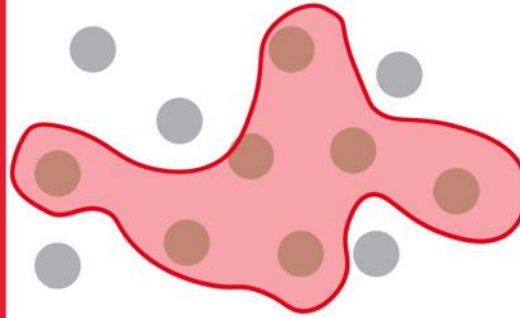


# How to harness Excess Capacity?



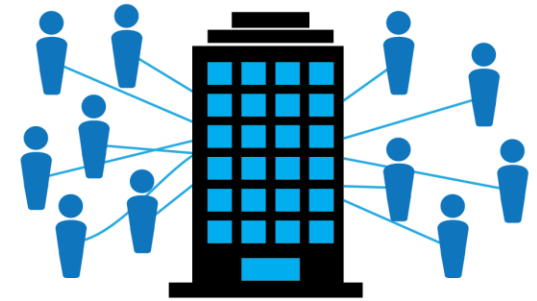
## SLICE

consume only what  
you need



## AGGREGATE

transform via a  
common interface



## OPEN

discover new value



# 2013 McKinsey report on OPEN DATA

# 2013 McKinsey report on OPEN DATA

**40+**

Number of countries with government open data platforms\*

**90,000+**

Data sets on data.gov (US site)\*

**1.4 million**

Page views for the UK open data site in the summer of 2013

**102**

Cities that participated in 2013 International Open Data Hackathon Day

**1 million+**

Data sets made open by governments worldwide

**\$3 trillion**

Approximate potential annual value enabled by open data in seven "domains"

**3 billion**

Metric tons of carbon dioxide equivalent emission reductions from buildings that could be identified through the use of open data

**35**

Hours per year could be saved by commuters from schedule changes based on open data

**100,000+**

Medical, health, and fitness apps for smartphones

**50%+**

Consumer share of potential value of open data

# Leveraging Open Data

- Citymapper -  
The ultimate transit app



With Smart phones, **TRANSIT APPS** make it easy to know

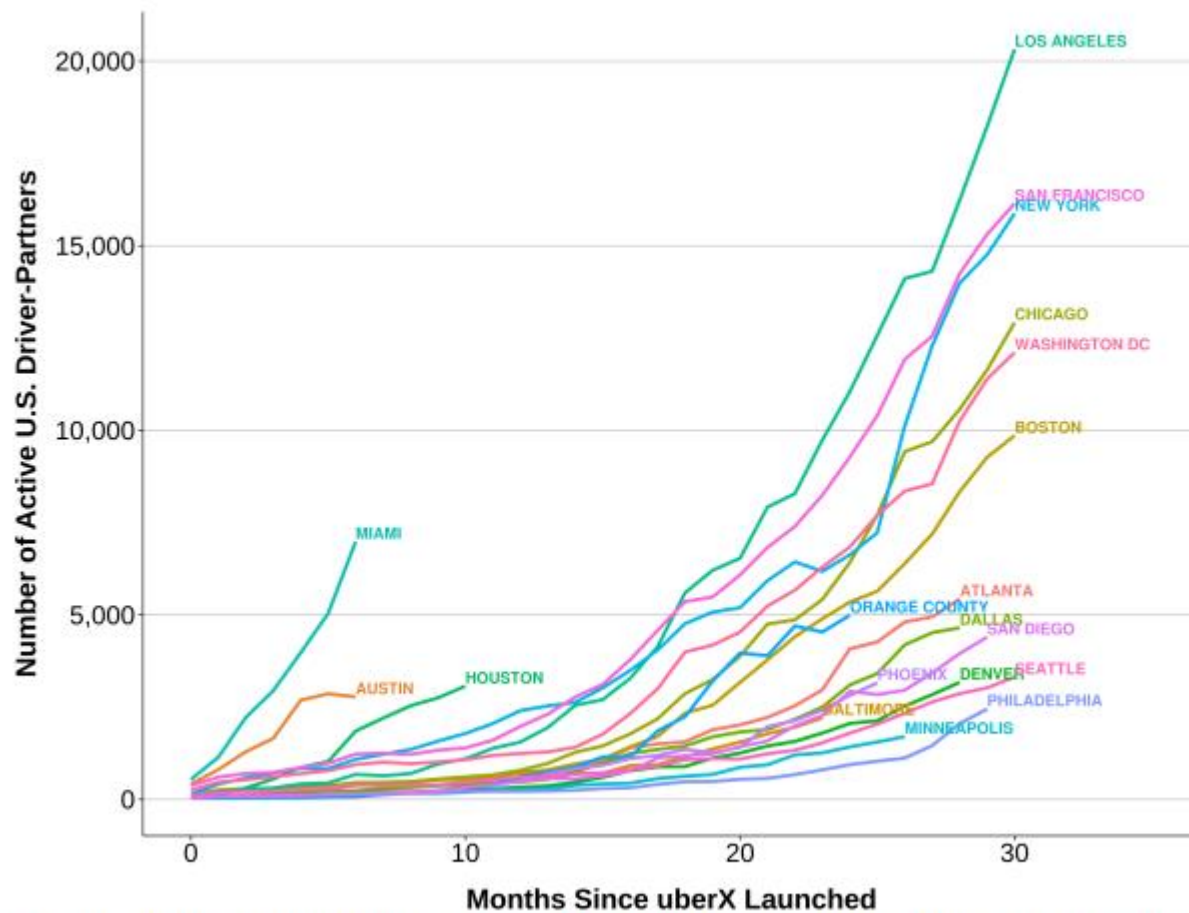
- Which train, bus
- What time
- Where to get on & where to get off

City Benefits:

- More riders
- Cheaper & better access
- Less congestion



Figure 5: Active U.S. Driver-Partners Over Time, by City



Note: Figure reports the number of U.S. UberBLACK and uberX driver-partners making at least one trip in the specified month, indexed to the number of months since Uber began in the city or June 2012, whichever came later.



# SHIPPERS, MEET CARRIERS. CARRIERS, MEET SHIPPERS.

We make shipping big stuff cheap and easy by helping customers directly connect with providers who have extra truck space.

[Get a Free Estimate](#)[Become a Carrier](#)

## VEHICLES & BOATS

Cars, Boats, Motorcycles,  
RVs, Trailers, Parts



## HOUSEHOLD ITEMS

Furniture, Appliances, etc.



## MOVES



## HEAVY EQUIPMENT



## FREIGHT

FTL, LTL



## ANIMALS

Dogs, Cats, Horses,  
Livestock

**3.5M** SHIPPING CUSTOMERS

**788,000** SERVICE PROVIDERS

**5.7M** SHIPMENT LISTINGS

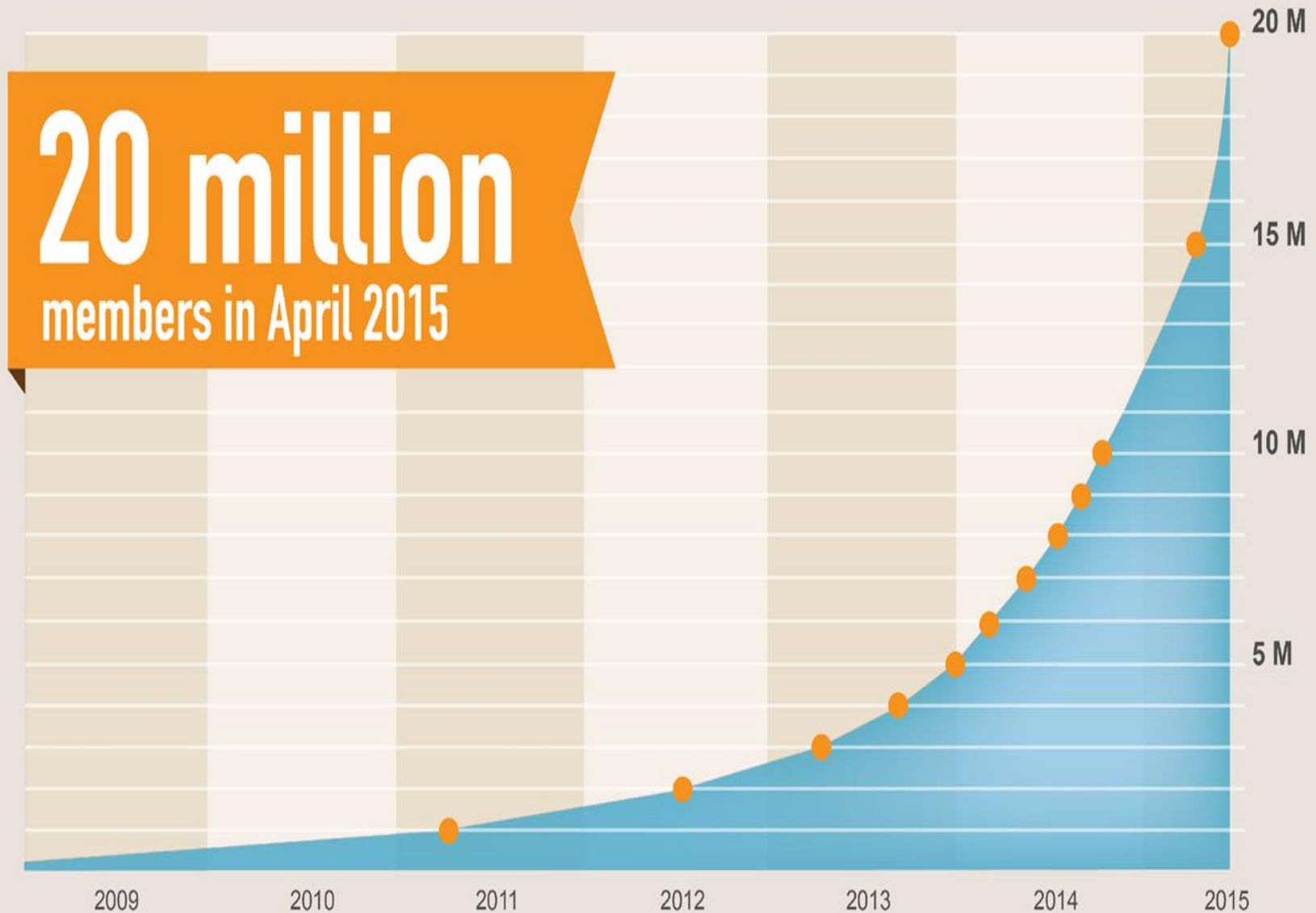


# Excess Capacity



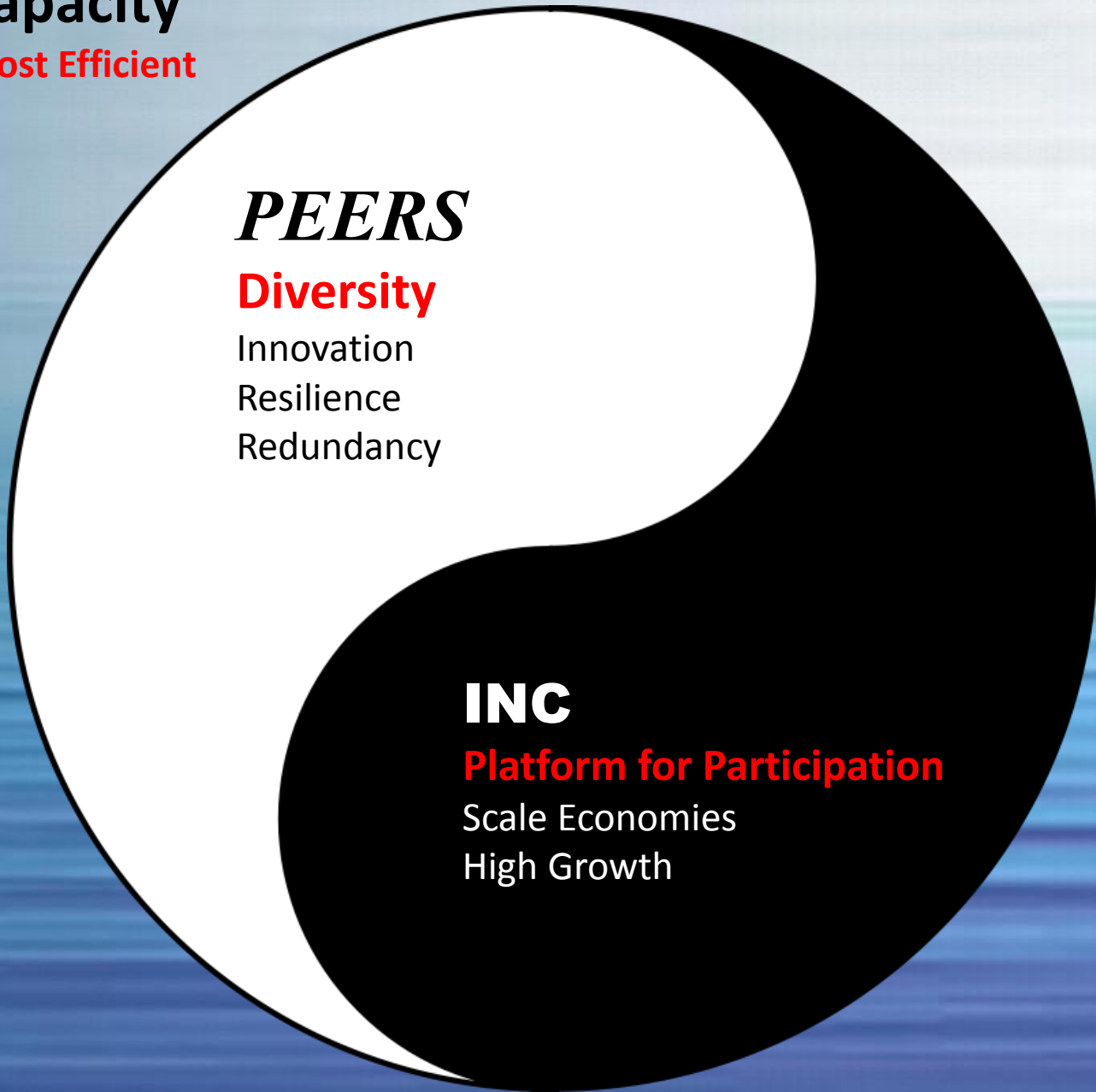
# BlaBlaCar

4m transported each month  
= 10k high speed trains  
= 10k 747s



# Excess Capacity

Resource & Cost Efficient





# Apple vs. Android: Number of Apps 2008 - 2013





# Car Rental Markets

**drivy**



**Drivy**

Paris

Launched in 2010

83 employees

**38k** cars

1m users

In 5 European countries

**\$53m**

in funding

**Getaround**

San Francisco

Launched in 2011

120 employees

**2.5k** cars

350k users

U.S.

**\$40m**

in funding

**GoMore**

Copenhagen

Began rentals in 2014

50 employees

**11k** cars

1.3m users\*\*

In 5 European countries

**N/A\***

in funding

**Turo**

San Francisco

Launched in 2009

150 employees

**N/A\***

N/A\*

U.S. and Canada

**\$101m**

in funding

\*COMPANY WON'T DISCLOSE SPECIFIC FIGURES \*\*INCLUDES CARPOOLERS

GRAPHIC BY BLOOMBERG BUSINESSWEEK;  
DATA: COMPILED BY BLOOMBERG



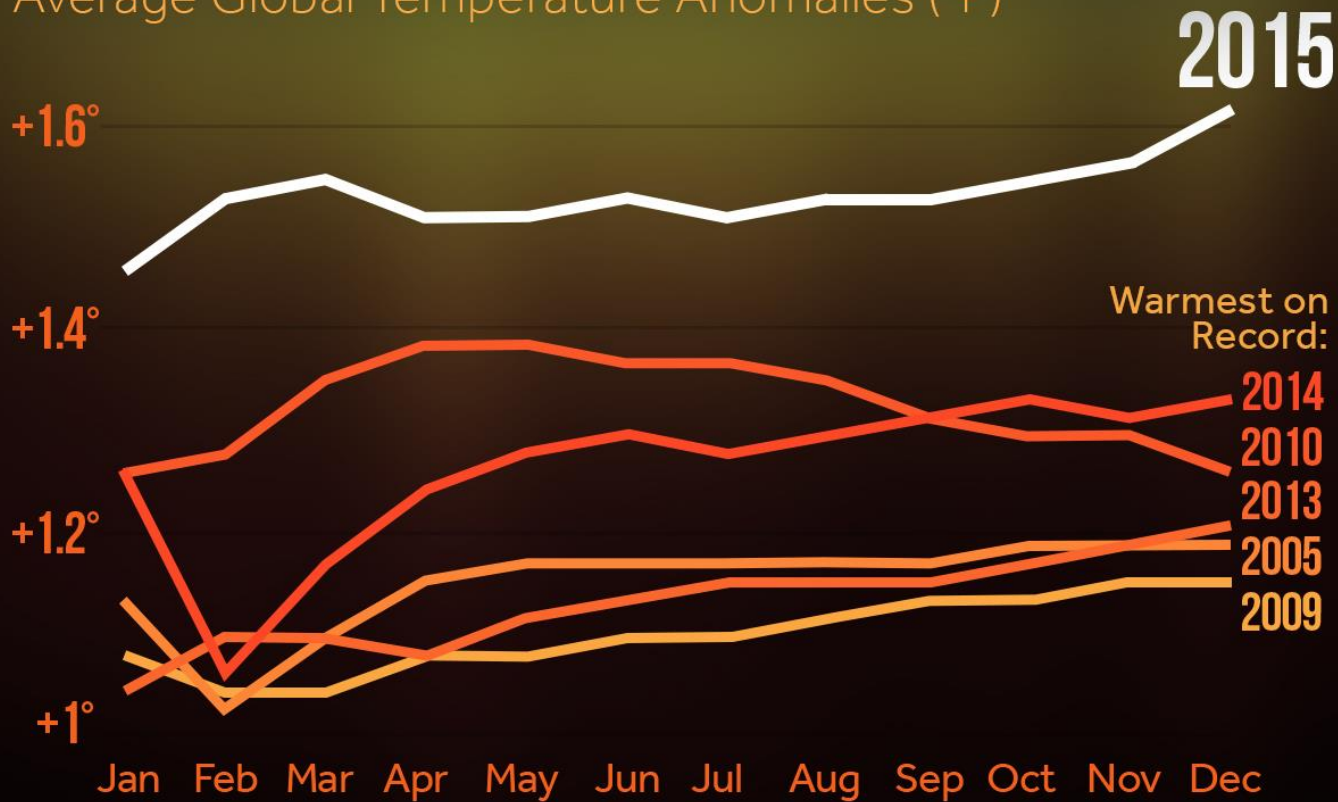
**Peers Inc**  
**Delivers 3 Miracles**

# Scientists say that by 2100, BAU → +5-6C

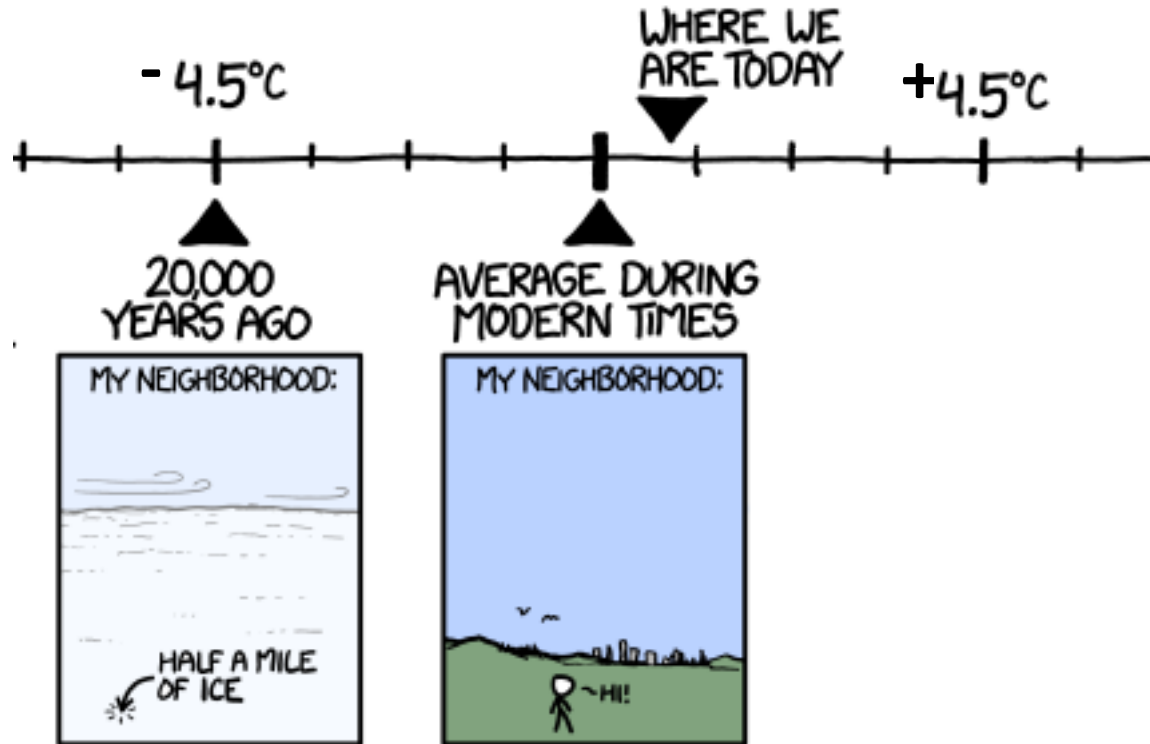
Every month in 2016 has been the hottest on record

## 2015: BLISTERING FINISH

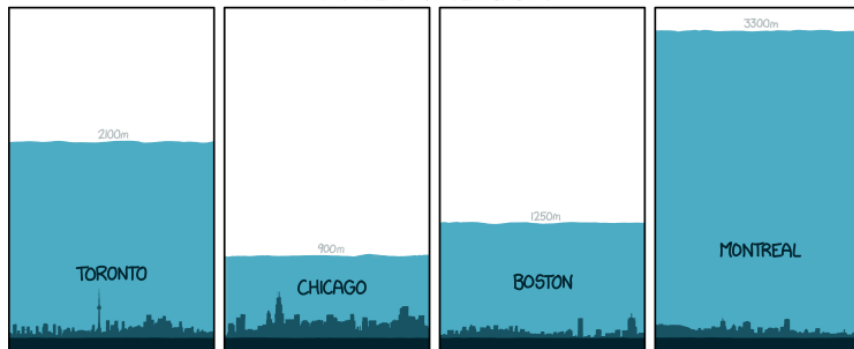
Average Global Temperature Anomalies (°F)




Source: NOAA  
Anomalies based on 20th century average



THICKNESS OF THE ICE SHEETS  
AT VARIOUS LOCATIONS  
21,000 YEARS AGO  
COMPARED WITH MODERN SKYLINES



Credit: Randall Monroe



You can't solve  
exponential problems  
with linear solutions.

Try  
*PEERS INC!*

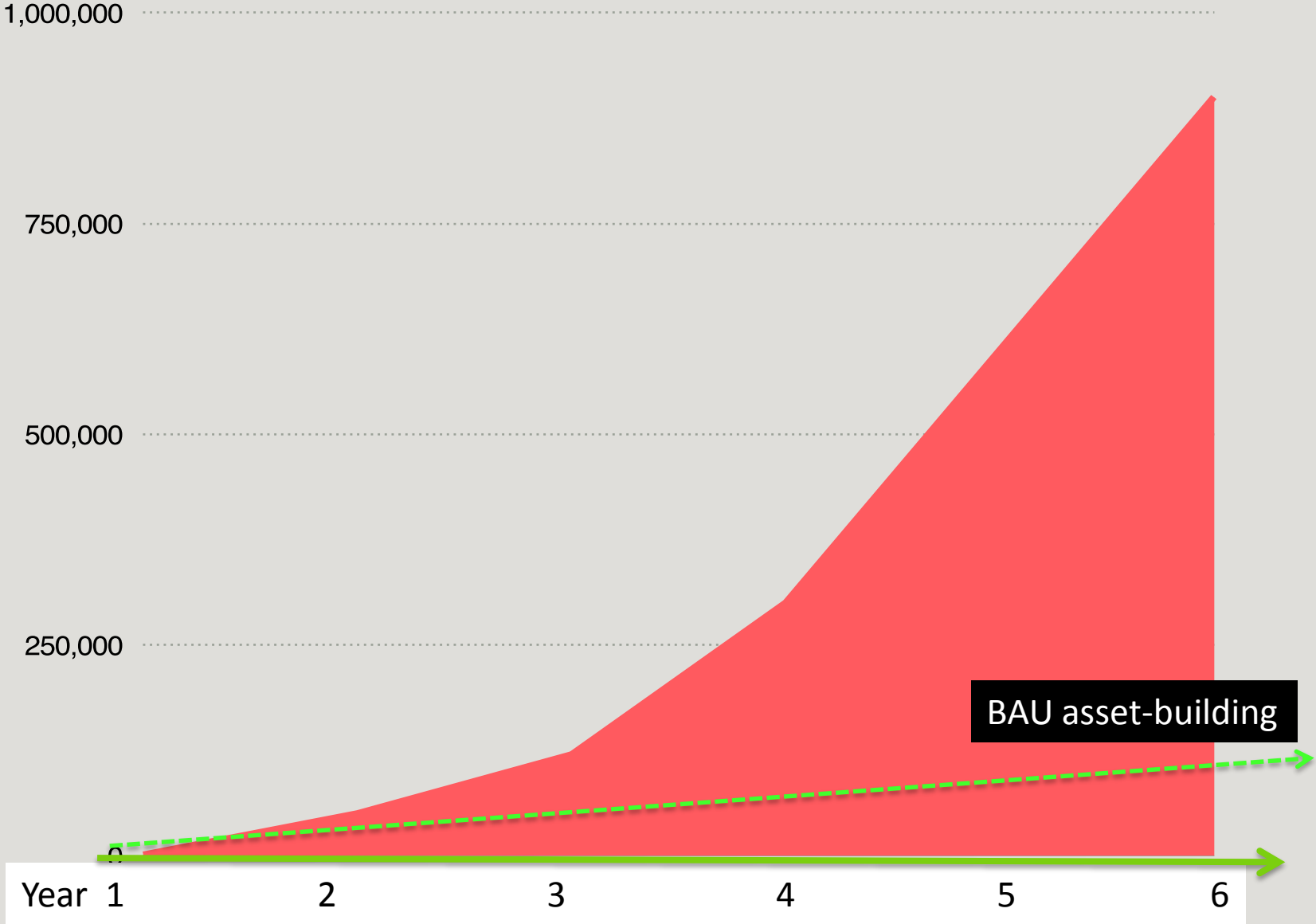
**BANNY BANERJEE, STANFORD**

# **The Miracles**

Because we are leveraging **excess capacity**

*Peers*  
**Inc** **#1** We can defy the laws of physics

# Cumulative Total Listings on Airbnb



Because we are building on **platforms for participation**

*Peers*  
**Inc #2** We can tap exponential learning



130 hours, one semester of college  
54 hours of Rosetta stone



130 hours, one semester of college  
54 hours of Rosetta stone

34 hours !



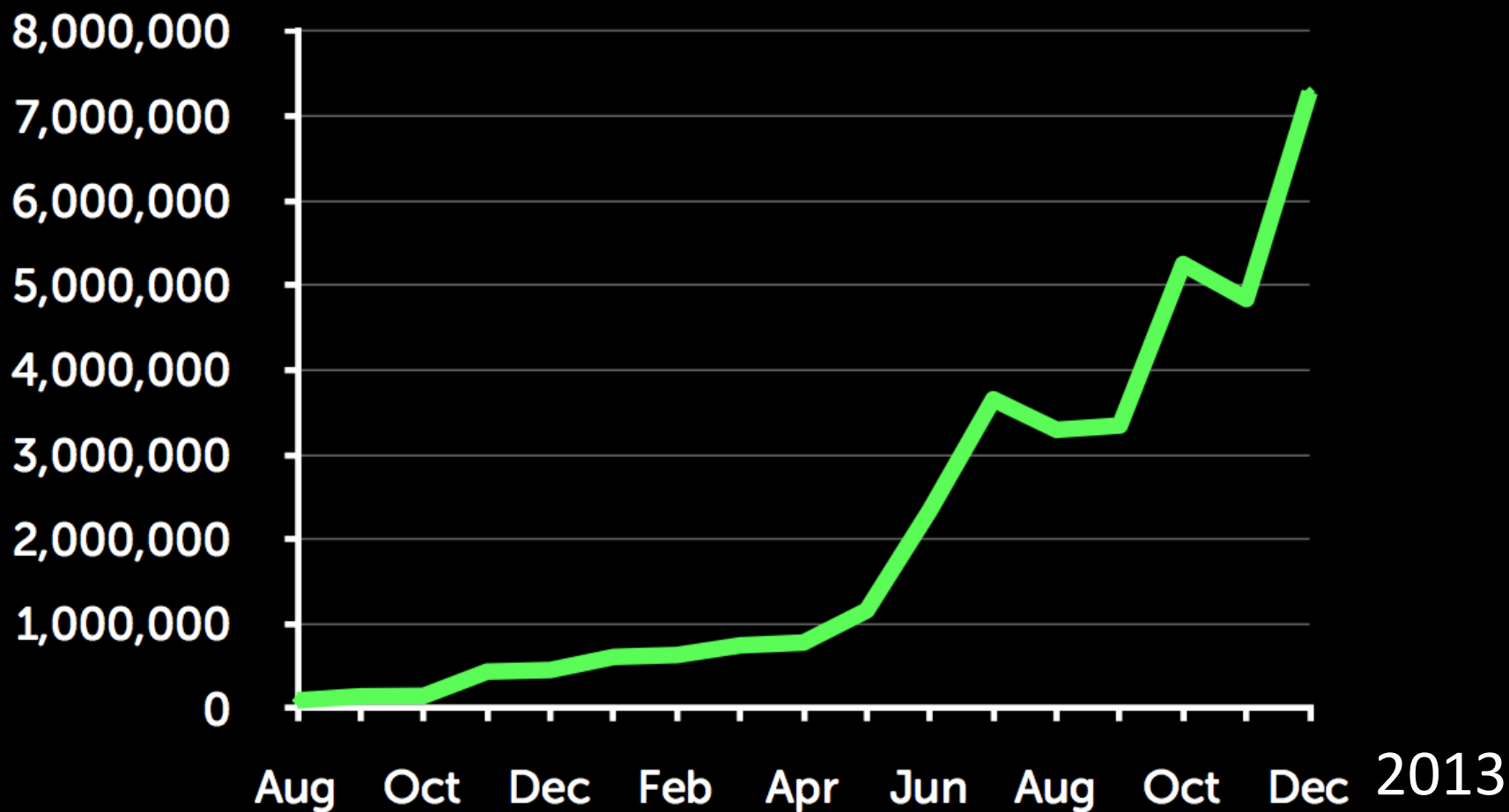
duolingo



duolingo

➤ 50M

# Monthly Actives



Because we work with a  
**diversity of peers**

*Peers*  
**Inc #3**

**The  
Right Person  
will Appear**





# waze

OUTSMARTING TRAFFIC, TOGETHER





**PEERS INC is a collaboration**

# PEERS INC is a **collaboration**

**#1** We can have exponential growth

*PLATFORM organizes & unleashes excess capacity*  
*PEER co-investment with existing assets*

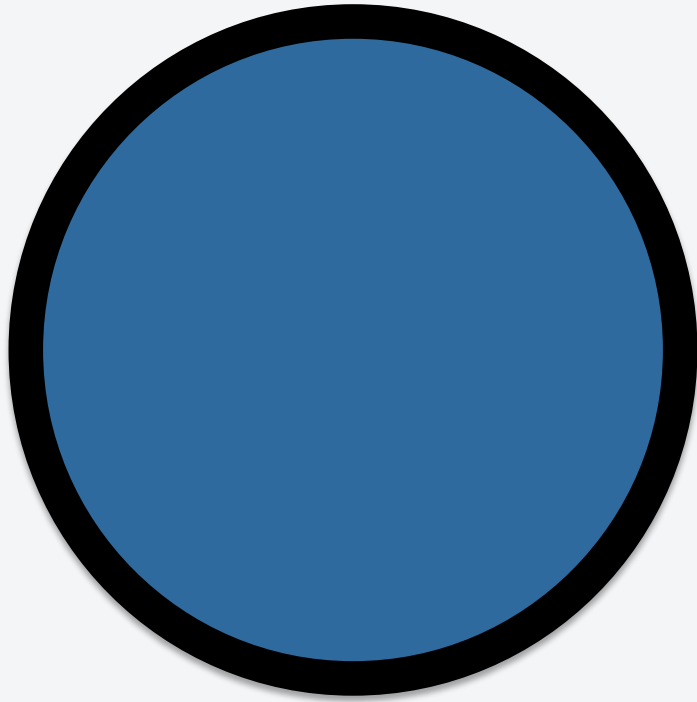
**#2** We can tap exponential learning

*100s of 1000s of simultaneous PEER experiments*  
*PLATFORM analyzes, learns, shares best practice*

**#3** The RIGHT person will appear

*PLATFORM (supercomputing + peer learning)*  
*Real-time adaptation by PEERs at the edges*

# Industrial Capitalism



# Sharing – the Collaborative Economy – is the future

Shared networked assets > closed assets

More networked minds > fewer 'proprietary' minds

Benefits of shared open assets > problems of open assets.

I get > I give

Structure for our dynamic times:  
Experiment, Iterate, Evolve, Adapt

We need these ideas to  
be bestsellers.

Share them widely

# PEERS INC



How People and Platforms are  
Inventing the Collaborative Economy  
*and* Reinventing Capitalism

## ROBIN CHASE

*cofounder of* ZIPCAR

**Enormous  
Imminent  
Disruption**





Autonomous

Clean

Shared



#California has now issued testing permits to 27 #AutonomousVehicles companies, up from 22 just last month. {#ai #selfdriving}

#### Autonomous Vehicle Tester Program

As of March 8, 2017, DMV has issued Autonomous Vehicle Testing Permits to the following entities:

- Volkswagen Group of America
- Mercedes Benz
- Google
- Delphi Automotive
- Tesla Motors
- Bosch
- Nissan
- GM Cruise LLC
- BMW
- Honda
- Ford
- Zoox, Inc.
- Drive.ai, Inc.
- Faraday & Future Inc.
- Baidu USA LLC
- Wheego Electric Cars Inc.
- Valeo North America, Inc.
- NextEV USA, Inc.
- Telenav, Inc.
- NVIDIA Corporation
- AutoX Technologies Inc
- Subaru
- Udacity, Inc
- Navya Inc.
- Renovo Motors Inc
- UATC LLC (Uber)
- PlusAi Inc

# A LIKELY SCENARIO: 5-year transition from CARS to FAVES

**Year 1:** 100 small vehicle pilot in mid-size city (students/tourists)

**Years 2-5:** Expands to 1000 vehicle fleet. *Cheaper & more convenient than status quo.* First 2<sup>nd</sup> vehicles sold. Then primary. On some routes, vehicles will become shuttle & bus size.

**Years 3-5:** Other cities need to adopt to be competitive/modern, innovative.



AVs for Urban & trucking



Suburban & Rural?

UBER CEO Travis Kalanick on deploying  
Autonomous UBERs in Pittsburgh (August 2016)

**There's an urgency to our mission about being  
part of the future. This is not a side project.**

**This is existential for  
us.**

**The infrastructure we build  
over the next 3 years  
will determine  
the fate of humanity.**

-Christiana Figueres



**When you take the driver out of the car:**

**THE ECONOMIC THRESHHOLD  
for moving a vehicle is low.**

**EXPLOSION OF VIABLE USES**

# Where this explosion of trips happens matters

Exurban

Urban





# AV benefits are differentiated by population density.

**AVs**

Personal & Electric  
Exurban

Safety benefits felt here.

**FAVES**

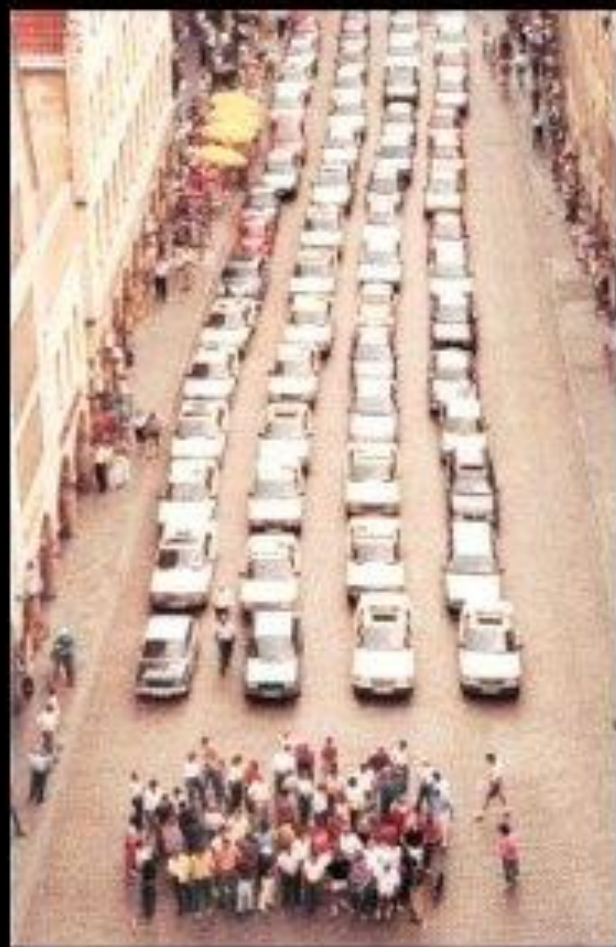
Fleets of AVs that are Electric & Shared

Urban.

Transformed land use (shared) & better air quality (electric) key benefits here.



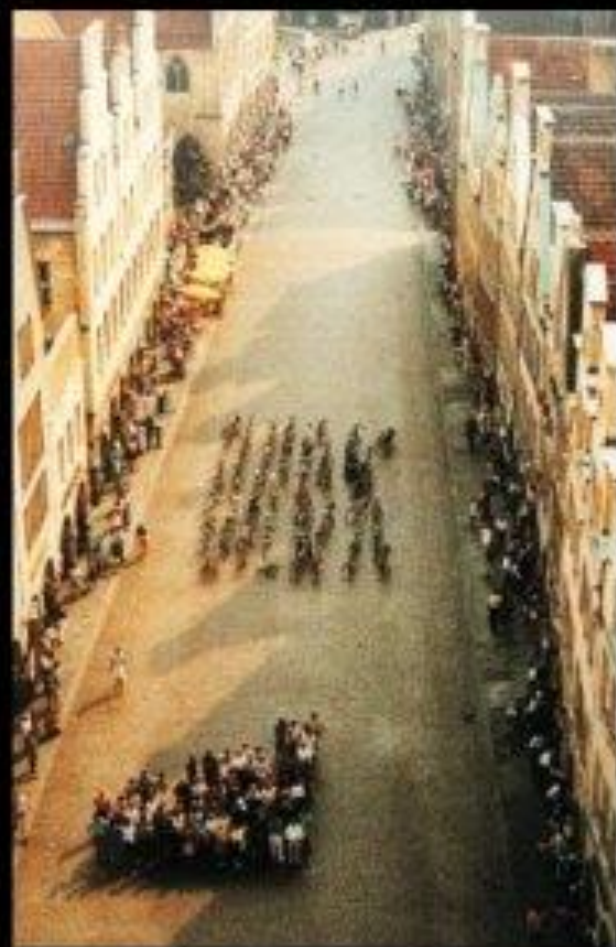
space required  
to transport **60** people



car



bus



bicycle



Here are 200 people in 177 cars



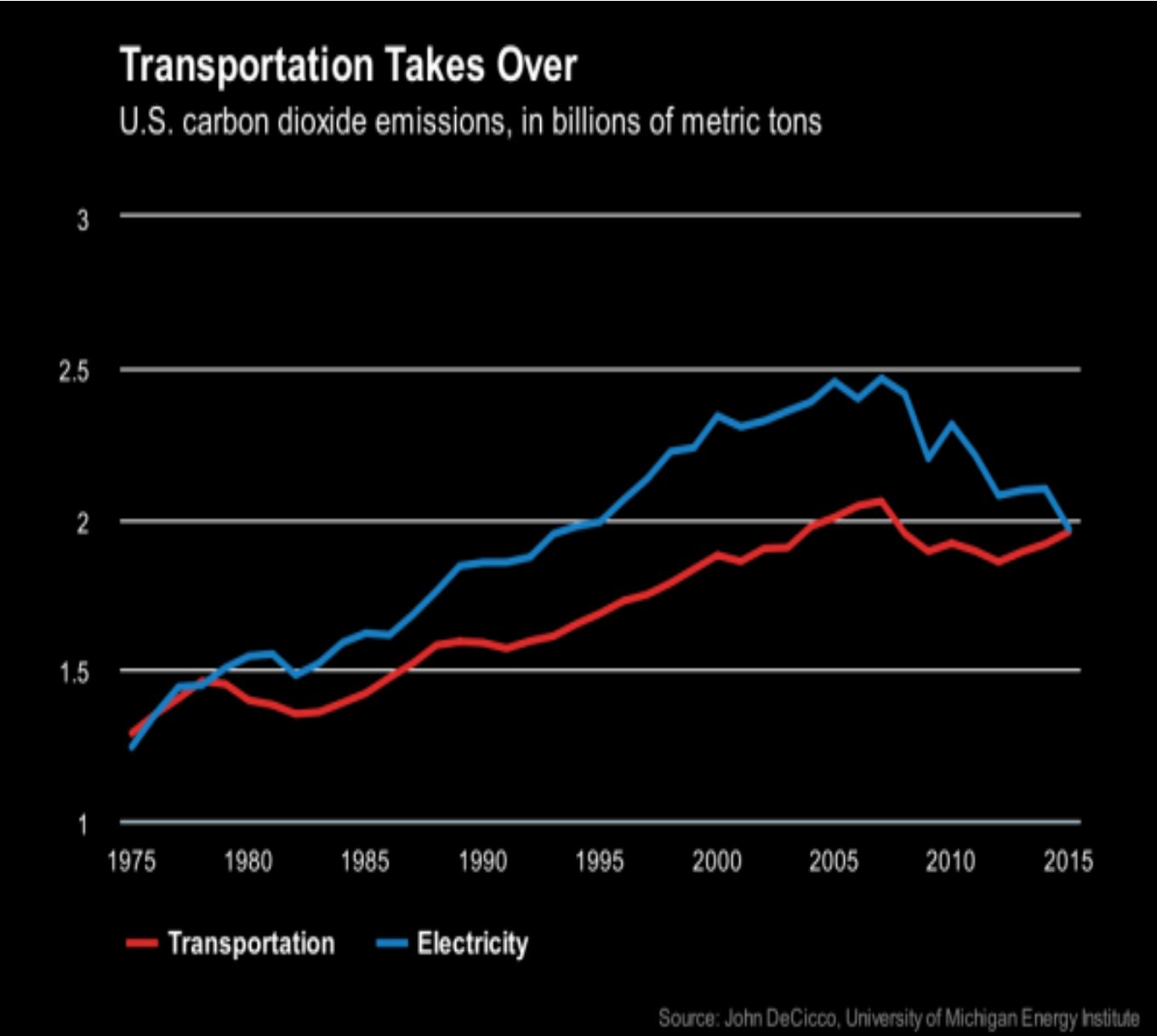
space required  
to transport **60** people



car



# FAVES will be the fastest path to electric mobility



**HOW WE USE NEW SPACE  
MATTERS**

# Cheonggyecheon River in Seoul





# Cheonggyecheon River in Seoul





# Allocate to active modes?





## **Today's Retail in Urban Areas**



Suburban warehouse

# RETAIL AUTOMATED TRIPS

OBSERVER

POLITICS | ARTS & ENTERTAINMENT | STYLE & DESIGN |

SELF DRIVING CARS

## Self-Driving Cars Will Fill the Streets With RATS, Zipcar Co-founder Says

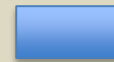
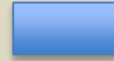
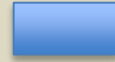
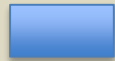
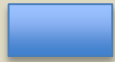
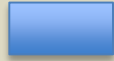
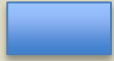
By [Brady Dale](#) • 11/21/16 7:19am





Tomorrow

**RATS**

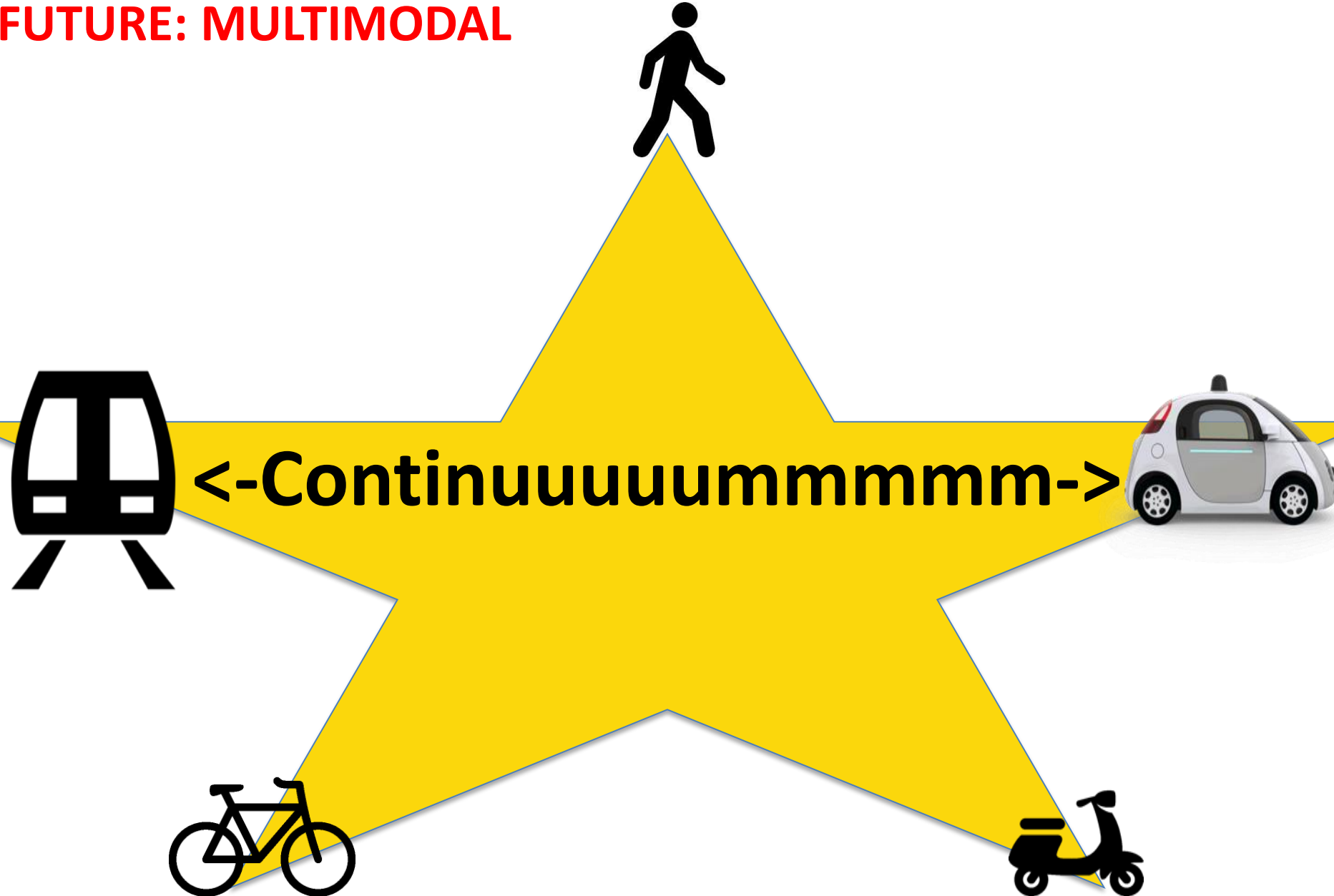




RATS in the  
countryside are fine!  
RATS in the city !?

Remember  
DENSITY MATTERS  
For AV policy &  
benefits

# FUTURE: MULTIMODAL



# **NEW MOBILITY PROTOCOL FOR LIVABLE CITIES**

## **PHASED**

- 1) Standard and pooled data for competitive & quality shared transport services**
- 2) Zero emission fleets**
- 3) Congestion sticks (pricing) & carrots (land use)**
- 4) AVs only in shared fleets**

**see [osmosys.org](http://osmosys.org)**

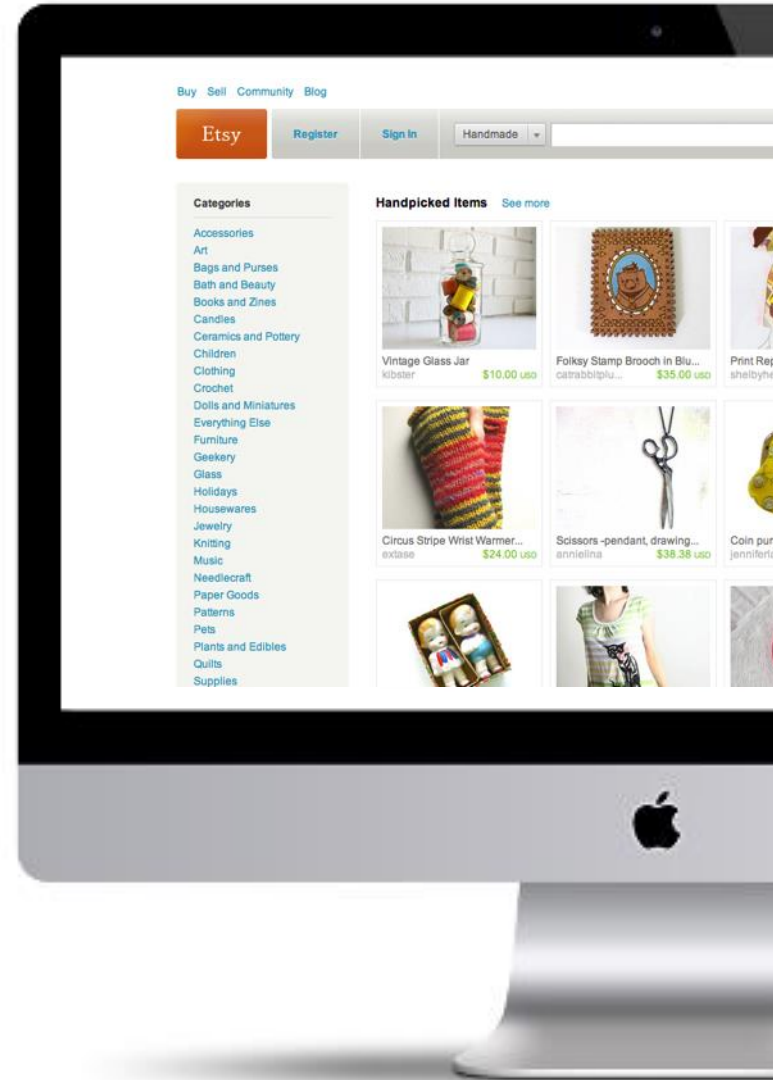
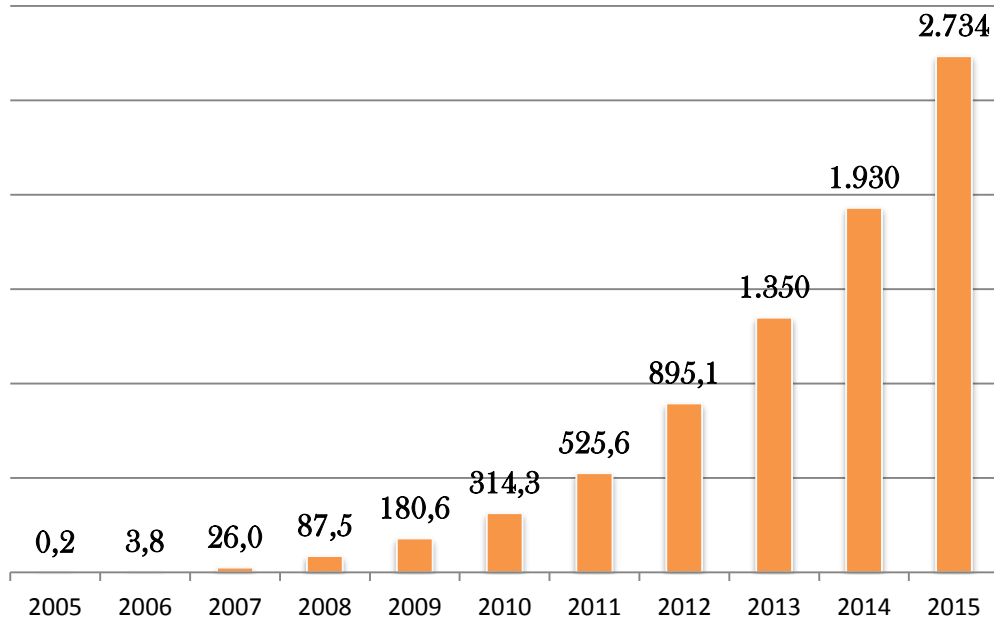


# A FUTURE PRIORITIZING PEOPLE NOT CARS



**END**

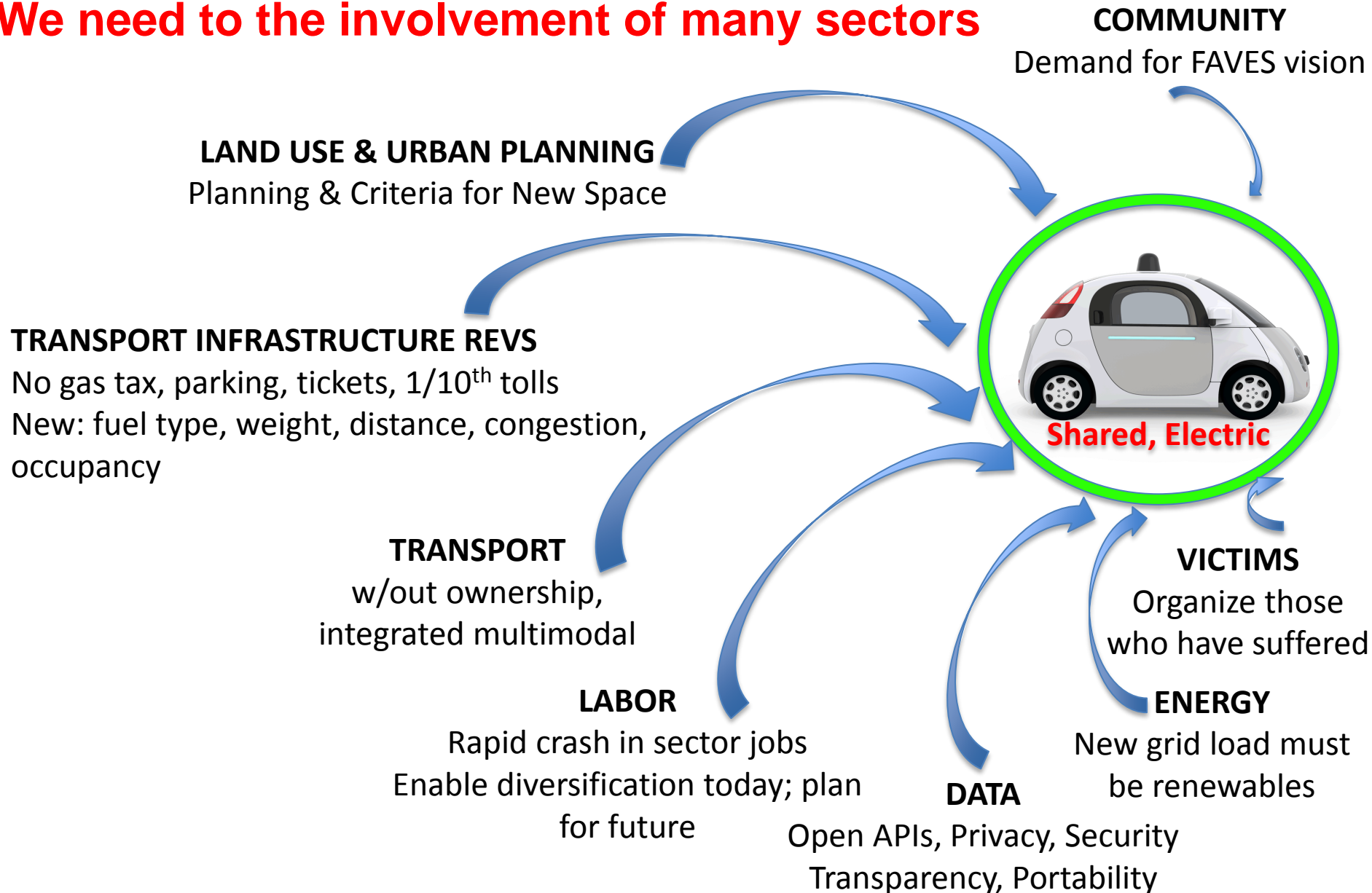
# ETSY SALES (MILLIONS)





# To accomplish this big vision 10% OF CURRENT VEHICLES

We need to the involvement of many sectors



A detailed historical map of a city street grid, likely from the 19th or early 20th century. The map shows a dense network of streets, with some major thoroughfares like 'Great Oxford Street' and 'Dorset Street' clearly visible. The map is overlaid with a semi-transparent grey box containing the main title and two smaller semi-transparent boxes containing sub-headers and descriptions.

# AV policy must be differentiated by population density.

## AVs

Personal & Electric  
Exurban

## FAVES

Fleets of AVs that  
are Electric &  
Shared

Urban.

**PEERS INC is a  
collaboration**

**Smart cities**

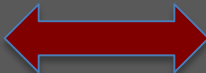
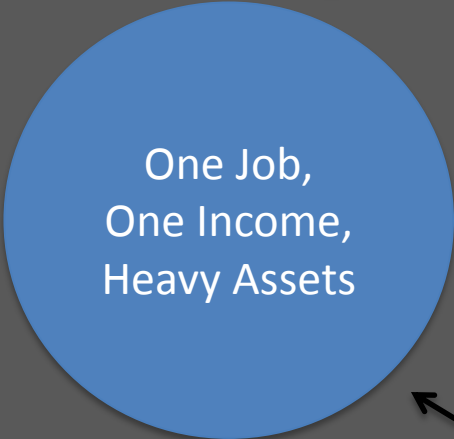
**Smart homes**

**Smart transportation**

**Smart grids**

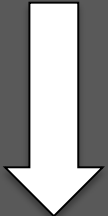
**All rely on this  
collaboration**

Emerging  
Market  
Economies



Boss hires/fires

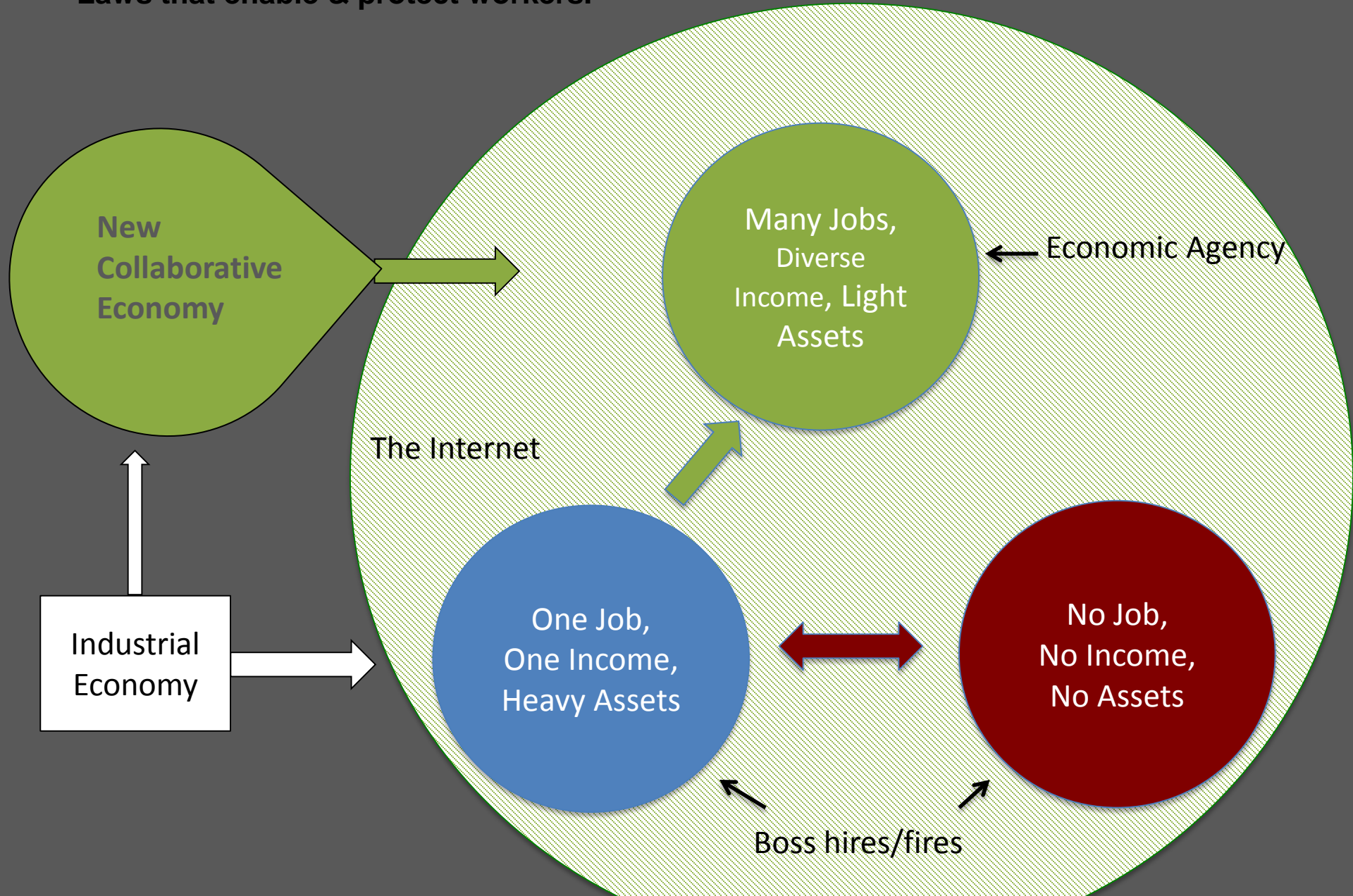
Industrial  
Economy





# A RESILIENT AND INNOVATIVE ECONOMY.

Platforms that empower people.  
Laws that enable & protect workers.



**Good for bus company  
Bad for passengers**



Las Vegas' Strip Express is the kind of Bus Rapid Transit system that could eventually be self-driving. (Photo: ITDP)

Taxes for Motor vehicle manufacturing & use = \$206 Billion/year\*  
(\$110b state & \$96b in federal)

Current Sources:	With electric Avs
<del>Gas Taxes</del>	None
<del>Toll revenues</del>	<b>Fall by 60-90%</b> (the higher end if we go to FAVES
<del>Permits &amp; Fees</del>	<b>(reduced vehicles through tolls))</b>
<del>Tickets &amp; Fines</del>	
<del>Parking</del>	
<del>Registrations</del>	



& 2<sup>nd</sup> order effects  
Loss of taxes on associated labor &  
businesses now defunct

\* <http://www.autoalliance.org/files/dmfile/2015-Auto-Industry-Jobs-Report.pdf>



HOW DO WE PEERS ?

INC



How People and Platforms are  
Inventing the Collaborative Economy  
*and* Reinventing Capitalism

ROBIN CHASE

*cofounder of* ZIPCAR



In 6 Months



2000 Listings



December 2014

April 2015

July 2015