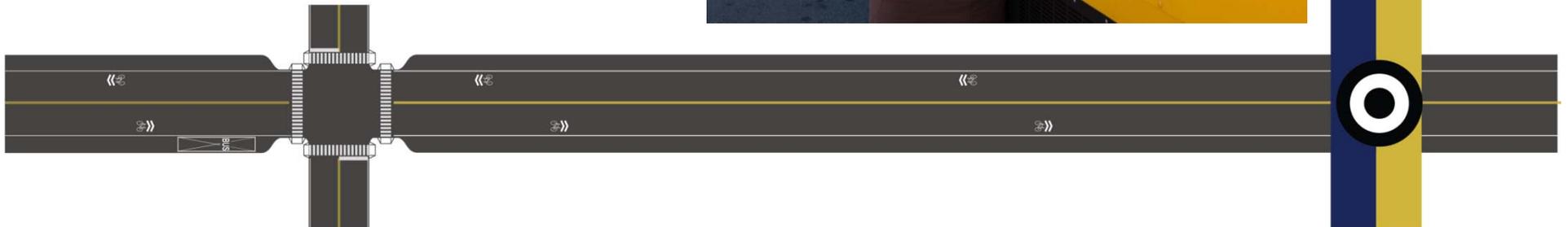


# Open Transit Data: Evolution and Best Practices

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August 7, 2014

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“

You take the data that's already there...jujitsu it, put it in a machine-readable form, and let entrepreneurs turn it into awesomeness.

”

Todd Park  
United States Chief Technology Officer



# Topics Covered

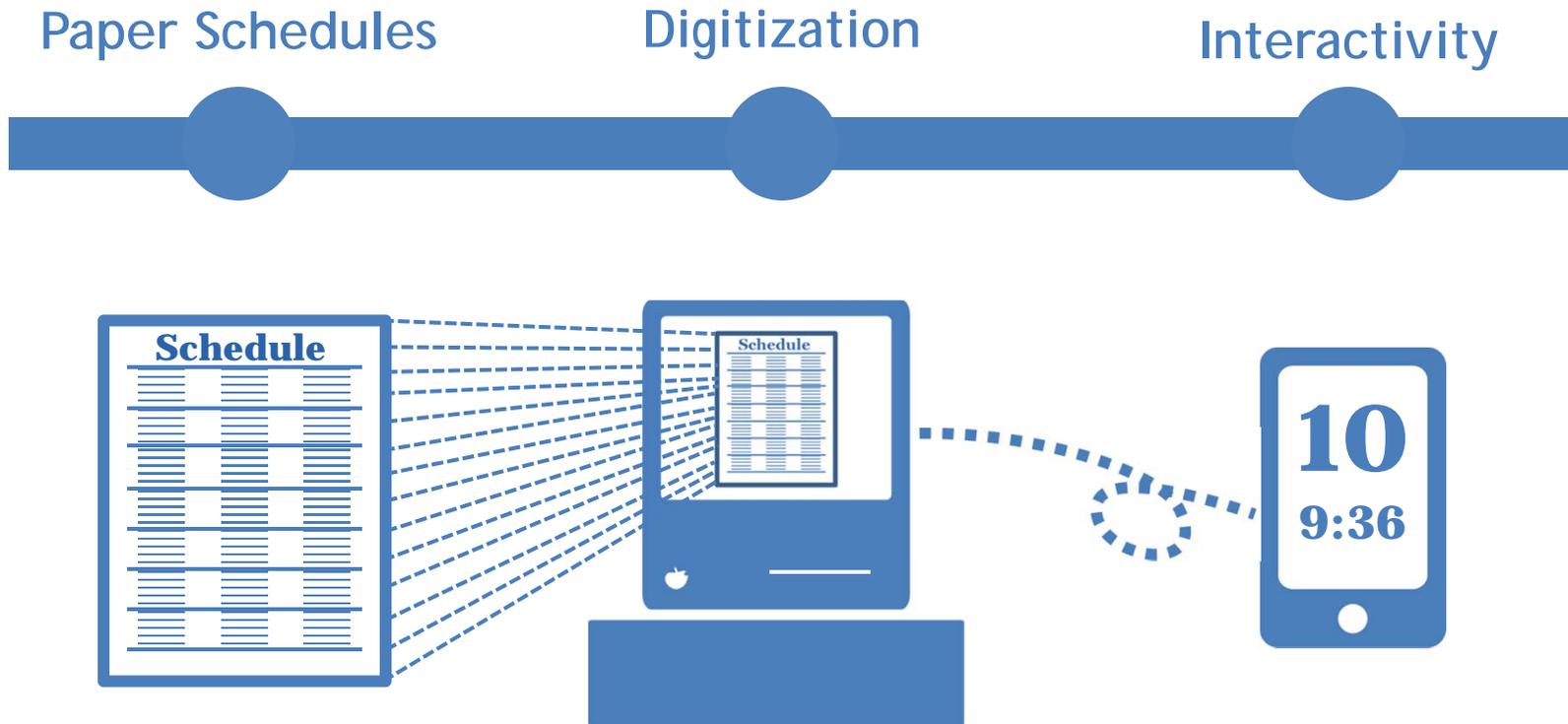
- Evolution of Transit Data
- Why Open Data?
- Case Study Findings

# Evolution of Transit Data



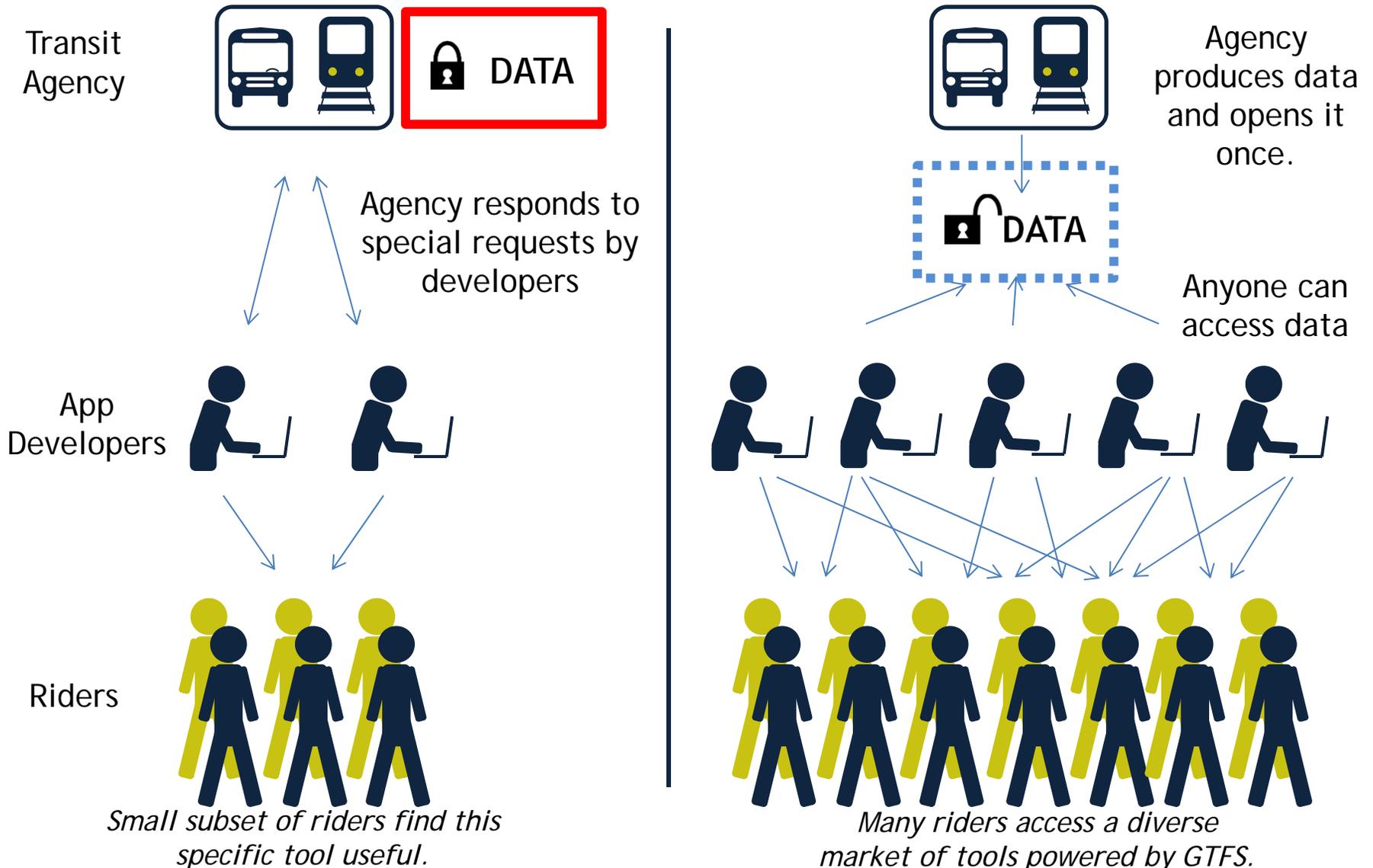
# Transit Data Consumption

The changing landscape

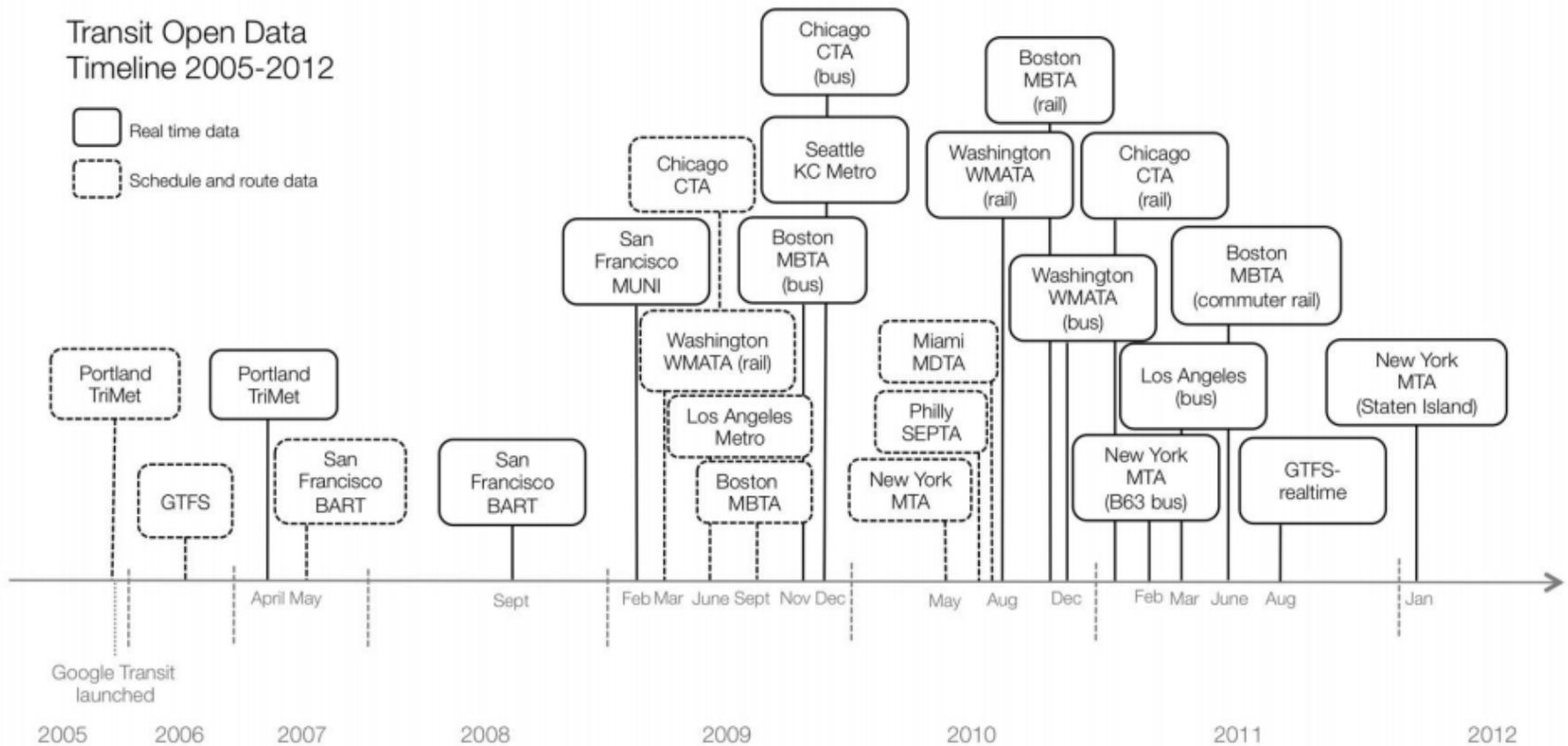


# How Does Open Data Help?

## Data access models

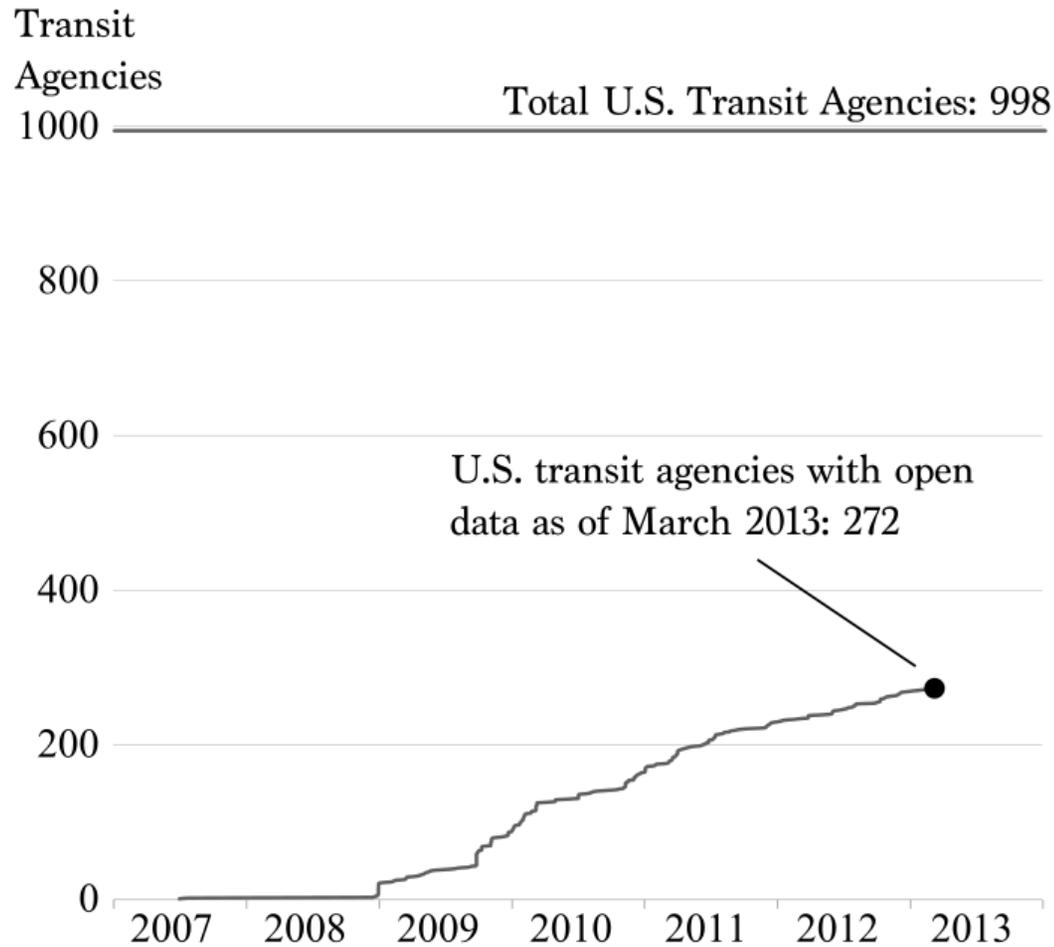


# Transit Open Data Timeline



Source: Rojas, Francisca (2012) Transit Transparency: Effective Disclosure through Open Data

# Open Schedule Data (GTFS) Adoption



(a) U.S. transit agencies with open data

Source: Wong, James. (2013). Leveraging the General Transit Feed Specification (GTFS) for Efficient Transit Analysis. Proceedings of the 2013 Transportation Research Board Annual Meeting.

# Why Open Data?

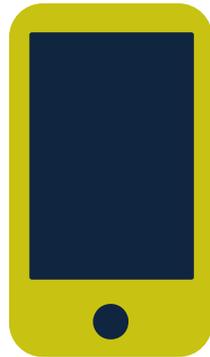


# Motivation for Open Data

- Improves customer service
- Increased information access to transit riders
- Fosters innovative and diverse apps
- Interconnected regional transit
- Agency transparency
- Plus...

# Equitable Information Access

Encompasses Diverse Personal Technologies



Considers All Abilities/ADA Access



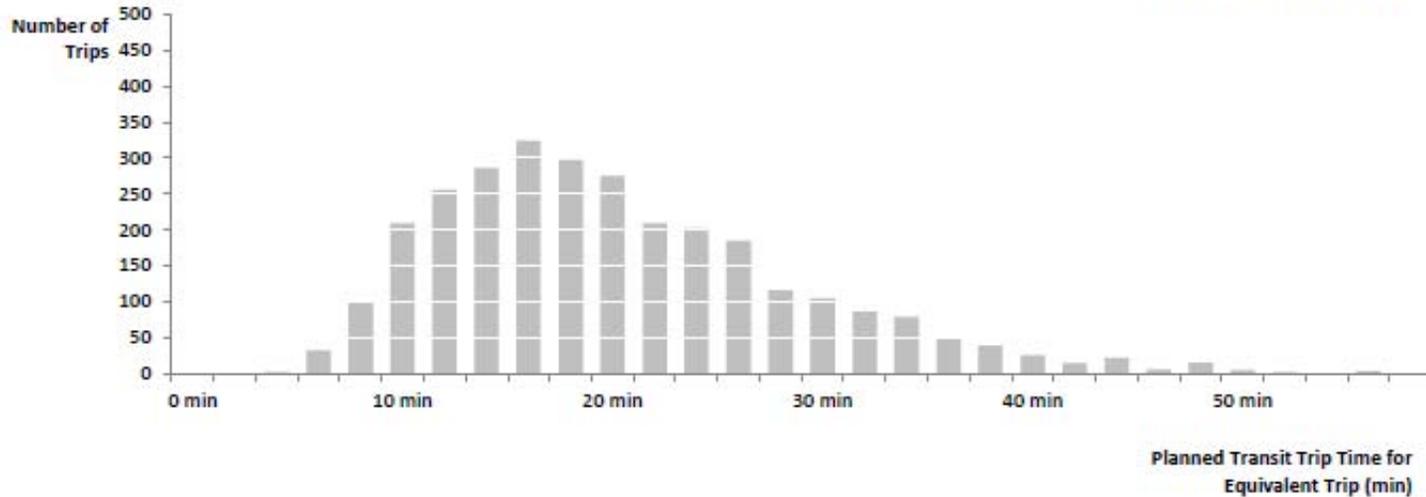
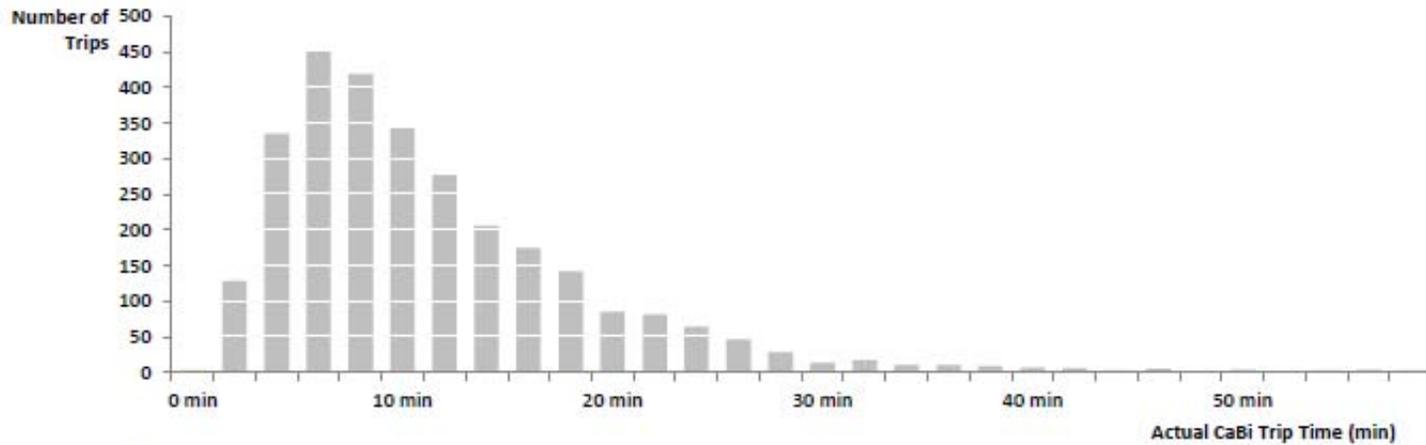
# Fast Paced Innovation

Agency Releases Real Time Data



# Data Analysis Across Multiple Agencies

**Distribution of CaBi Trips by Travel Time**  
Compared with equivalent planned transit trips



Source: Wong, James (2012) – from an analysis performed in conjunction with Open Plans

# Case Studies Findings



# Case Studies

- Transit Agencies
  - Philadelphia
  - San Francisco
  - Chicago
  - New York
  - Boston
  - Atlanta



- Email and phone interviews with staff

# Getting Started with Open Data

Overcoming perceptions and attitudes

- Technical feasibility

- Legal concerns

- Brand confusion
- Logo usage
- Liability

- Deployment costs

# Best Practices

## Successful deployment tactics

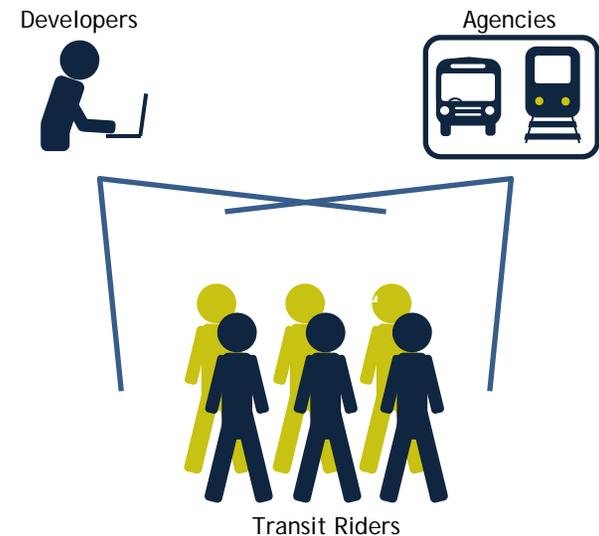
- Open data should be accurate and up-to-date
  - Transit riders will rely on the data
  - Construction, closures, schedule changes should be updated.
- Implementation
  - Staff-level champions and strong leadership leads to successful deployments
  - Strong leadership can help push past legal concerns
  - Staff-level champions implement changes and will be on the front line with developers

# Best Practices

## Working with app developers

- Express agency concerns through usage agreements
  - Logo and transit map usage
  - Ensuring developers don't misrepresent themselves or apps as "official"

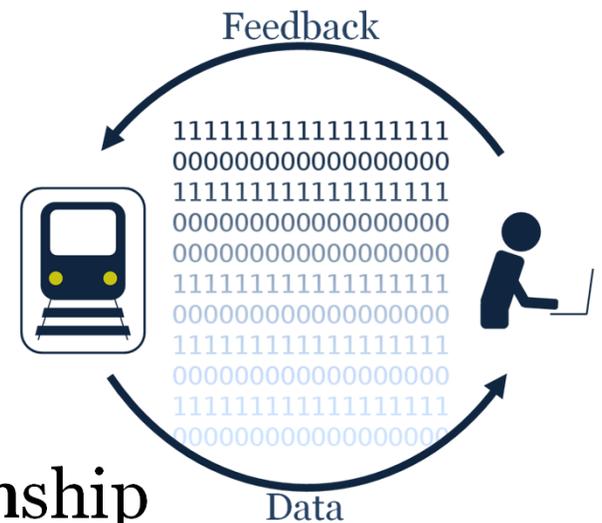
- Developer Relationships
  - Different levels of engagement
  - Support for mutual customers



# Best Practices

## Working with app developers

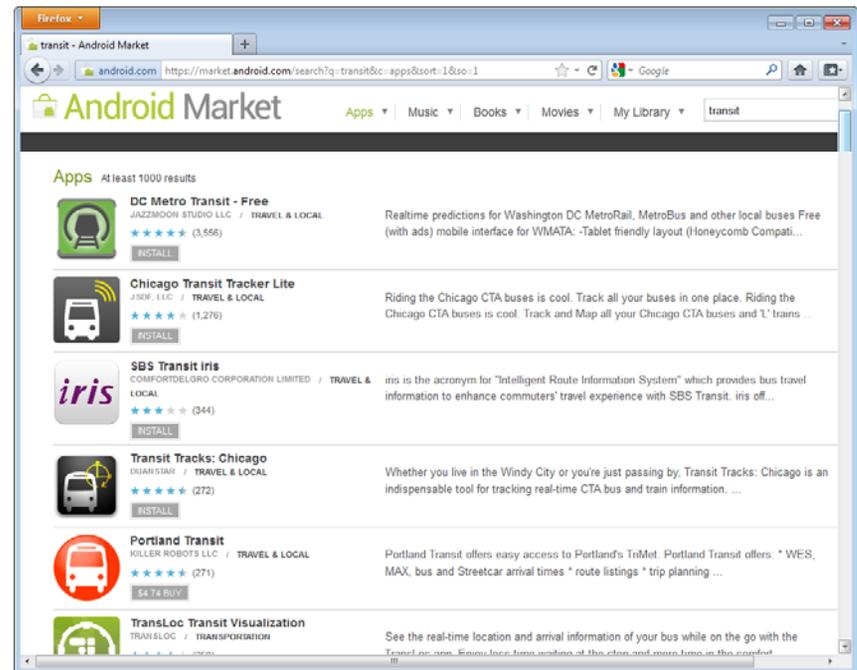
- Sustainable and holistic
  - Avoid “once-off” mentality
  - Ongoing and continuous relationship
  - From the website to the conference
- Open communication lines
  - Frequent interaction with developers yields trust and maintains interest
  - Release updates early and often (feedback loop)
  - Simple, clear, earnest communication



# Best Practices

## Performance measures

- Ways to track usage
  - App downloads
  - Number of apps developed
- App Accessibility & Equity Inventory
  - If apps miss disadvantaged groups, consider filling in gaps at the agency
- Market Research Surveys



# Thank You!

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**Georgia Tech**  **Civil and Environmental Engineering**

