



CUBIC | Transportation Systems

California Transportation Commission

Larry Yermack

December 7, 2016

MISSION

IN TRANSPORTATION:

we provide essential information and payments capability to allow agencies, operators and patrons to **increase efficiency and reduce congestion.**

Cubic is a global provider of integrated systems and services that **increase situational awareness and understanding** for transportation and defense customers worldwide.

IN DEFENSE:

we provide mission-critical information to **improve and sustain combat readiness** of U.S. and partner nation militaries worldwide.

BUSINESS UNITS

**Cubic
Transportation
Systems**



**OVER 450 OPERATORS SERVICED THROUGH 20
REGIONAL BACK OFFICES**

**Cubic
Global Defense**



**PRODUCTS AND SYSTEMS
DELIVERED TO THE UNITED STATES
AND 35+ ALLIED NATIONS**



**COMPREHENSIVE RANGE
OF EXERCISE AND TRAINING EVENTS
SUPPORTED WORLDWIDE**



1

Cubic Transportation Systems

WHO WE ARE

World's leading provider of **automated payment, ITS and fare collection systems and services** for the transportation industry.

Our Business Model is Based on:

- Long-term partnerships with transport agencies and operators
- Integration of emerging technologies such as mobile and open payments
- Delivery of world-class services

Over **50** million passengers use Cubic systems daily

Over **\$50** million in revenues collected daily

Over **20** regional back-office systems in operation

Over **400** projects

- **40** major markets
- **5** continents

Over **\$4.5** billion in contracts awarded

Over **2,400** employees worldwide

CUSTOMER FARE COLLECTION

		TIMELINE			
1991	New York MetroCard		2008	Los Angeles TAP® Brisbane go card BART NFC Pilot	  
1999	WMATA SmarTrip®		2009	San Diego Compass Card Miami EASY® Card Modena, Italy	  
2002	Chicago ChicagoCard™		2010	MTA CharmCard™ MTC Clipper® Card Skåne, So. Sweden	  
2003	London Oyster®		2011	So. Florida – EASY® Card PATCO Open Payment Pilot Google Wallet Acceptance	  
2004	BART EZ Rider		2012	Sydney Opal Card	
2005	Minneapolis Go To Card		2013	Chicago Ventra Card	
2006	MARTA Breeze™ RMV/KVV Mobile Ticketing	 	2014	London Future Ticketing Agreement Chicago Google/iPay Acceptance	 
2007	PATH SmartLink™ PATCO FREEDOM® Card	 	2015	Vancouver Compass Card Ventra App	 

MAJOR CUSTOMERS



Chicago



San Francisco



Massachusetts



London



New Jersey,
Philadelphia



Vancouver



United Kingdom



New York



New York



New York



South Florida



South Florida



UK / US



Washington D.C.



Modena



Toronto



Minnesota



Atlanta



San Diego



Sweden



United Kingdom



Edmonton



Los Angeles



Scotland



Frankfurt



Brisbane



Sydney



2

NextCity[®]

Intelligent Travel Made Real[®]



THE WORLD TODAY

- Growing populations
- Increasing urbanization
- Efficient transport networks are critical



THE WORLD TODAY

- Demand has to be predicted and managed
- Behaviour change through incentivization
- Real integration is needed – *but how?*

THE WORLD TOMORROW

- A clear and whole picture of the transportation network
- More informed travellers
- Equitable charging based on use and mode

THE WORLD TOMORROW

- Real-time and dynamic information
- Effective incident and crisis management
- Convenience of a *single mobility account*

THE FUTURE OF TRANSPORT



AFC / Open Payment Solutions / Mobile

Analytics

Real Time Passenger Information

Integrated Transport Management

Tolling

Parking & Shared Services

Public transport ticketing, revenue management & services

Big data tools, deep analytics techniques

Enables bus operators, customers to monitor bus status

Systems for traffic and transportation management and information

Road user charging

Availability, reservations, fare payment for parking, taxis, ride sharing

VISION

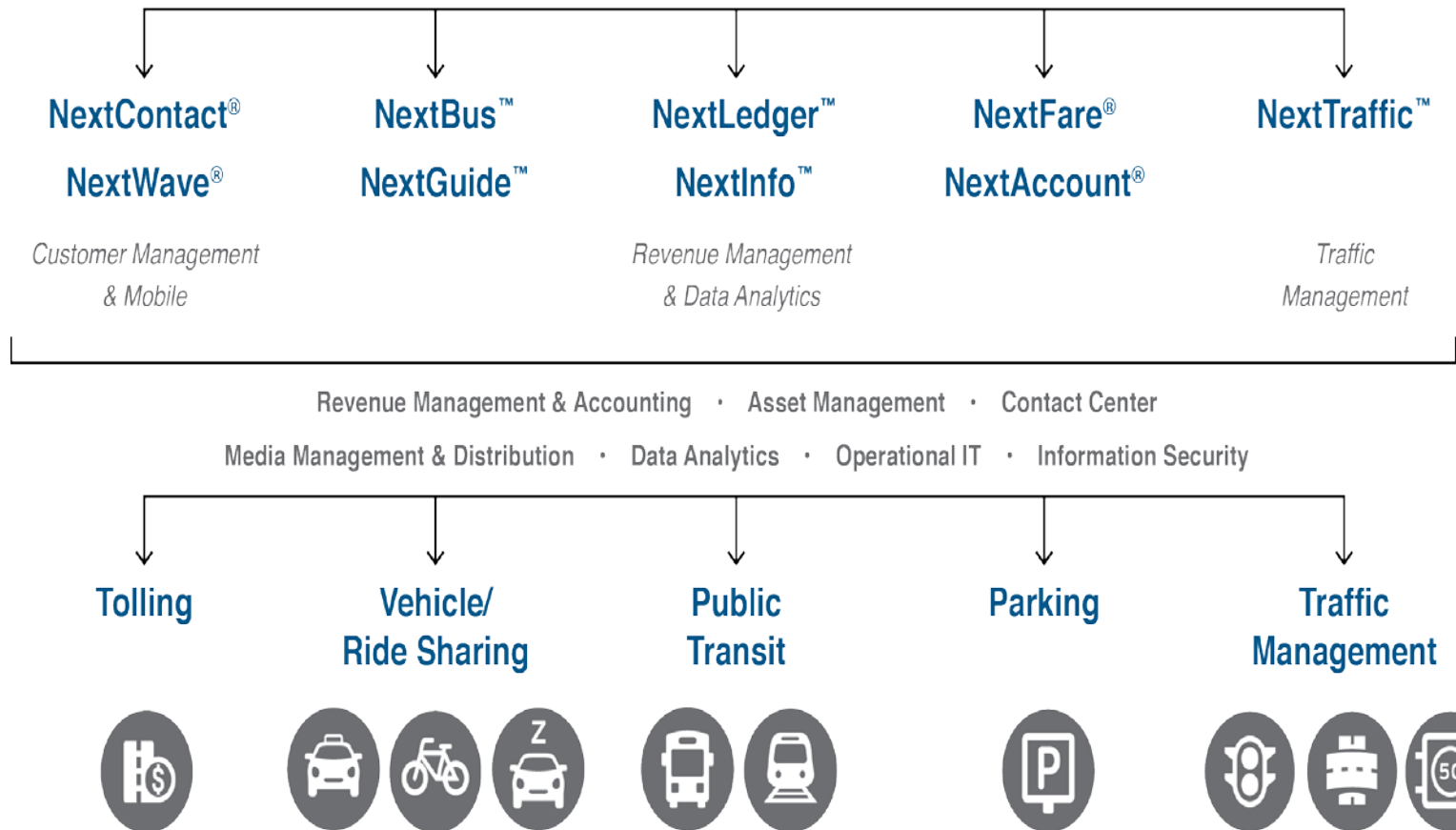
- One Payment Account, All Modes
- Personalized and Pushed Traveler Updates
- Smarter, Real-Time Journey Planning
- Integrated Pricing (“Super Day Pass”)
- Real-Time Integrated Use Information
- Dynamic Information and Price Updates
- Trended, Integrated Data Analytics
- Leveraging Existing Assets



NextCity[®] ECOSYSTEM



Intelligent Travel Made Real[®]



THE VISION BECOMING REAL: LONDON



- World's largest and most complex multi-modal smartcard-based fare system – 12.4 million journeys every day including Oyster and contactless EMV bankcards
- 100+ million contactless bankcard journeys to date
- Open payments with Fare Capping; contactless bank cards and mobile smartphones. One payment media for all regional travel.



THE VISION BECOMING REAL: CHICAGO

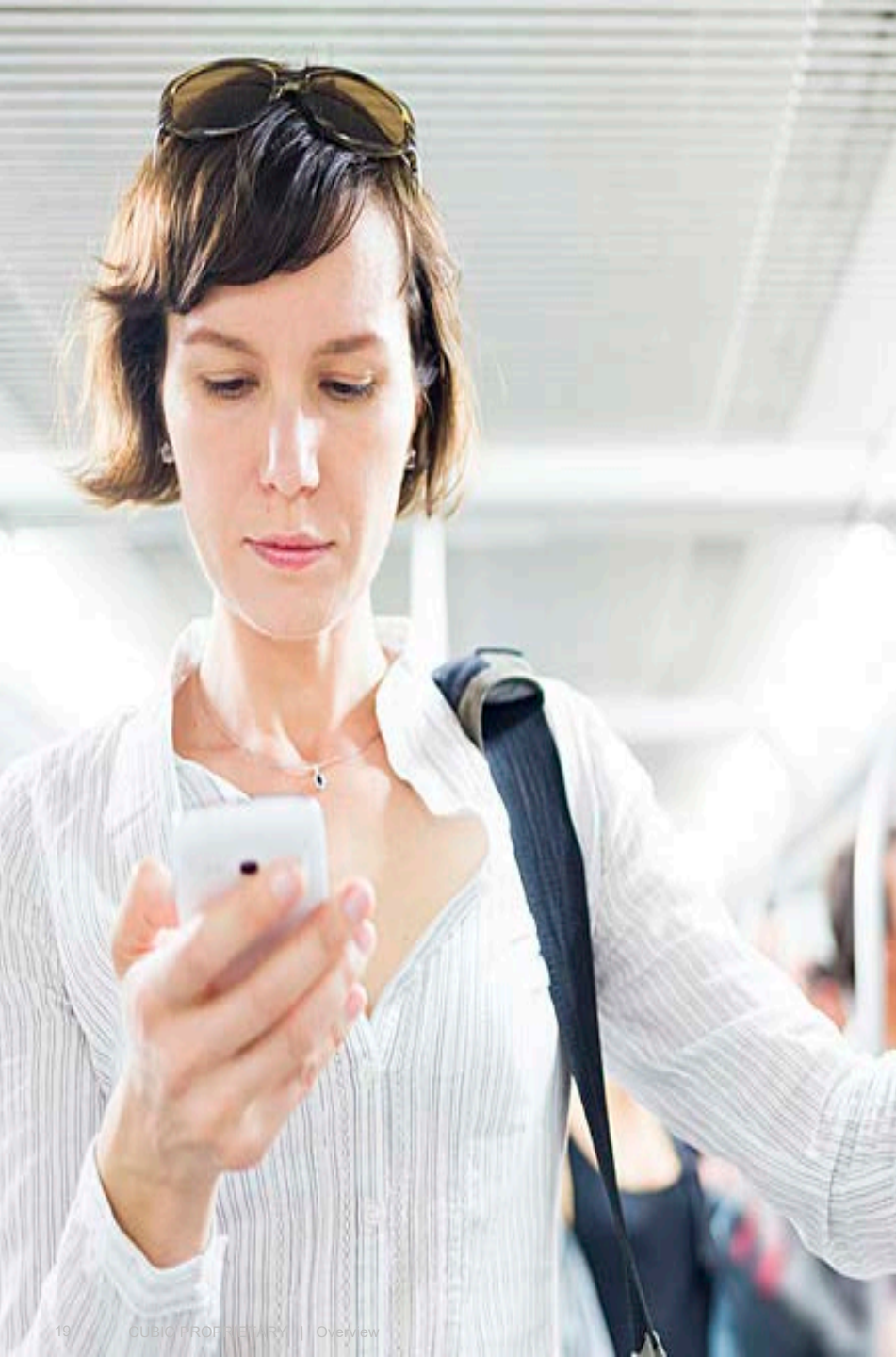
- First Full-Scale Open Loop Roll-Out Account-based system
 - Mobile Payment
 - Offered across modes and agencies
- Unique opportunity with a public and private partnership
 - 1st time in USA financing an AFC project of this scale
- Ventra Card
 - 1.6 million taps on average weekday
 - >1.1 billion transactions (thru 18 May 16)
- Ventra Mobile App
(From 19 Nov 15 to 18 May 16)
 - >415k downloads; 100% app availability
 - >1.1 M commuter rail ticket orders
 - Sales >USD 28.5 million



THE VISION BECOMING REAL: SAN FRANCISCO

- Clipper® is the regional smart card system linking all transit systems in the San Francisco Bay Area
- More than one million passenger trips daily by BART & MUNI combined
- Section 132 pre-tax commuter benefits
- NextBus™ has been providing real-time arrival information since 2002
- Cubic ITMS is the technology provider for *SFpark*
- Potential expansion opportunities in managed lanes, ICM, on-street and off-street parking, events





FOUNDATION FOR INNOVATION

- Intelligence moves from reader to back-office
- Move to multiple payment sources and account based proposition
- All payments integrated
- Data is transmitted and used instantly
- Travelers & devices permanently connected



THE BENEFITS

- Increased traveler convenience
- Better informed travelers
- Reduced (shared) costs
- Richer patronage information
- Dynamic fare structures
- Demand management
- Incident and crisis management