CITY of DALLAS: On-Street Parking Implementing New Parking Tools

"Parking reform is such a terrific opportunity for improving city life… It's something quite small that can be done on a single block; it's very incremental. All the data is there. You just need to open your eyes."

Jeff Speck, renowned urban planner and author of the book, "Walkable Cities.

WHAT is it?

Public Amenity:

Is parking a resource, convenience, facility or benefit continuously offered to general public with or without charge

Public Service:

1: supplying a commodity or service to any or all community members

2: service rendered in the public interest

Public Parking:

Off street area or right of way owned by the municipality where vehicles may be temporarily parked with or without charge

Why is it Important?

- Impacts look and feel of the city and neighborhoods
- Affects traffic congestion
- Everyone pays for parking- costs associated with land use and neighborhoods
- Economic Development Costs
- Transportation costs
- Environmental sustainability costs
- Direct Costs

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Management Strategies:

Payment Technology

Operations Technology

Parking Database

Real-Time Information

Parking Controls and Best Practices :

Transit/TOD Policies

Requirements

Pricing

Management Strategies

Benefit Districts

Finance

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Explored in Pilot	Not Explored in Pilot
Parking Data – (Real-Time Information)	Mechanical/ Automated Solutions
Sensors	Guidance System
Multi-space Meters	Active sensing technologies
Single-Space Meters	Access control
PaybyPhone	E-payment
Parking Apps	Wayfinding
Branding	
Parking Related Services – (Car Share)	
Aesthetics & Function	

Parking Strategic Planning

Parking Management Area	Downtown Dallas 360 21st Century Strategic Parking Plan	City of Dallas Parking Management
Availability		
Additional on-street parking/ periphery of downtown		**Future Growth**
Surplus in parking/Parking available in wrong locations		**Future Growth**
Private parking restricted from public use - (shared use parking)		
Customer Service		
Multiple parking payment options		**Available Now**
Parking ambassador, customer friendly event		
Implement web-based citation management and payment		**Available Now**
Economic Development Strategy		
Parking facility guidelines and promote future parking needs		
Green parking - solar meters		**Limited Use**
Green parking - Transition old meter poles to bike racks		**Available Now**
Reinvest parking revenues into parking services		**Limited Use**
Pockets of public parking to promote adaptive		
reuse and in-fill development & historic building preservation(context sensitive design)		
Information		
Better way finding/branding - unified parking signage		**Future Growth**
Change downtown parking perception		**Future Growth**
Technology to promote parking- variable signage & real time space data		**Planned**
Educate patrons - safe parking		**Future Growth**
Reduced signage		**Planned**
Advertise the public parking system		**Planned**
Develop an Annual Parking Report		**Future Growth**
Integrate parking data into the city's GIS data		**Limited Use**
Parking Enforcement		
Parking enforcement technology-invest in mobile License Plate Reader		**Limited Use**
Centralized parking control center		
First ticket forgiveness		

Parking Strategic Planning

Parking Management Area	Downtown Dallas 360 21st Century Strategic Parking Plan	City of Dallas Parking Management
Parking Operations		
Real time enforcement optimization		Limited Use
Utilize best practices for parking management		Current Practice
Utilize parking data to improve operational efficiency		Current Practice
Management audit of parking citation collections and processing times		Limited Use
Develop and track parking management benchmarks		Limited Use
Parking Technology		
Modernize meter technology: multi space and credit card enabled		In progress
Pay-By-Phone and wireless sensor technology		Final Stage
Reduce operation cost: identify leaks in ticketing and payments		In progress
Be a leader in smart parking technologies/next generation parking		Planned
RFP for Comprehensive On-street Parking Program		Initial Stage
Policy		
Reassess parking fines/booting/towing/multiple tickets/time limits		Future Growth
Reduce restrictions for on-street parking (for residential use)		
Retail parking strategy		
Parking facility standards		
Stronger comprehensive public parking program		Planning Stage
Promote actual supply/demand parking		Future Growth
Rates		
Reassess pricing/ Dynamic Pricing		Future Growth
Special event parking too high		
Free weekend parking		
First hour free in public parking lots		
Valet		
Valet parking top priority		
Consistent valet parking standards		Planning Stage
Valet parking ordinance changes		
Create valet nodes		Planning Stage
Valet partnerships with private garages to increase valet supply		

PaybyPhone Growth

Bar chart legend:
- Transactions (blue)
- Unique users (tan)
- New users (black)
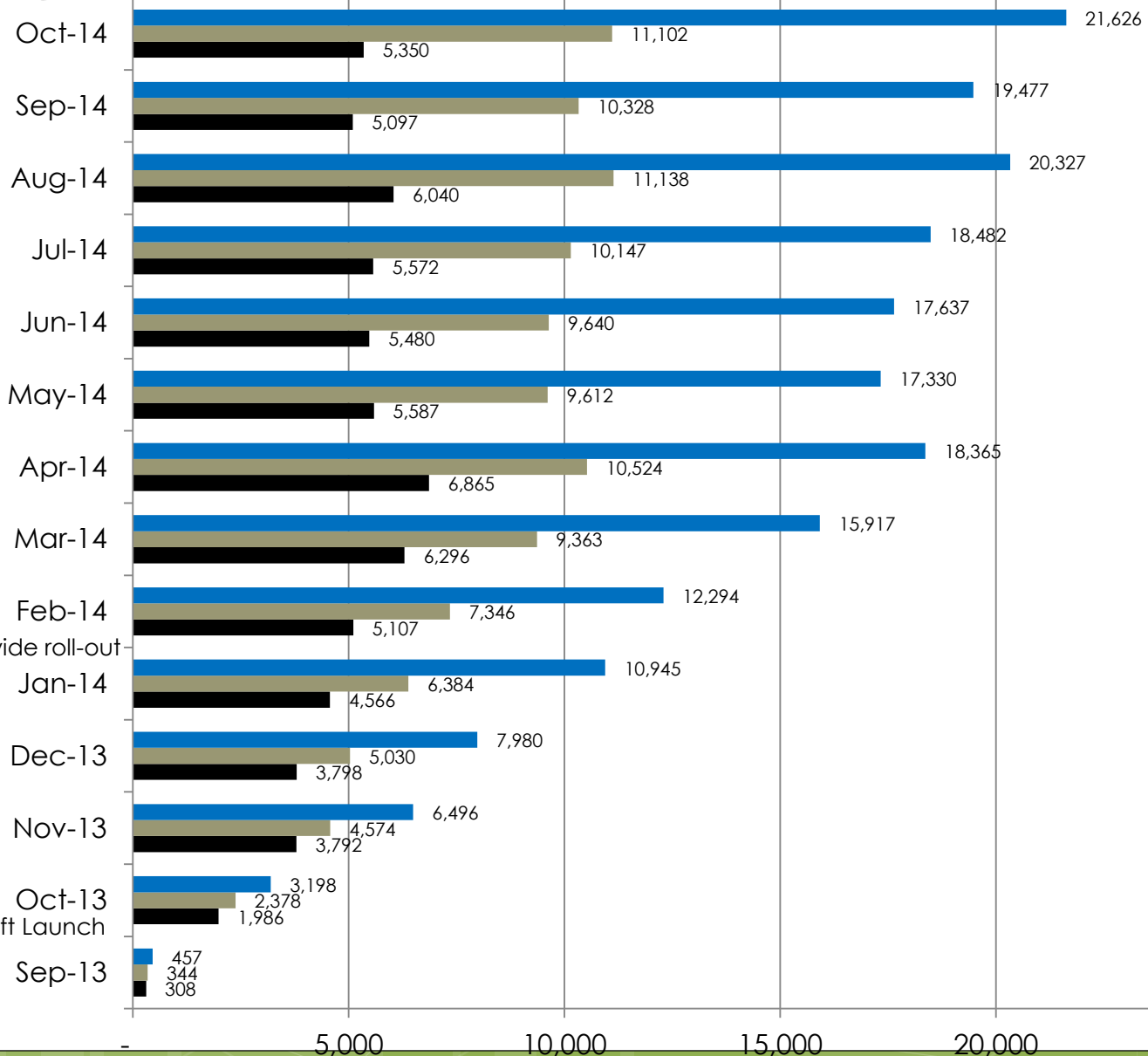
Month	Transactions	Unique users	New users
Oct-14	21,626	11,102	5,350
Sep-14	19,477	10,328	5,097
Aug-14	20,327	11,138	6,040
Jul-14	18,482	10,147	5,572
Jun-14	17,637	9,640	5,480
May-14	17,330	9,612	5,587
Apr-14	18,365	10,524	6,865
Mar-14	15,917	9,363	6,296
Feb-14	12,294	7,346	5,107
Jan-14	10,945	6,384	4,566
Dec-13	7,980	5,030	3,798
Nov-13	6,496	4,574	3,792
Oct-13	3,198	2,378	1,986
Sep-13	457	344	308

City-wide roll-out (Jan-14)

Soft Launch (Oct-13)

Total September 2013 thru October 2014	
Transactions	New users
190,531	65,844

Total September 2013 thru October 2013	
Transactions	New users
3655	2294

Total September 2014 thru August 2014	
Transactions	New users
41,103	10447

The International Parking Institutes' 2013 Emerging Trends in Parking Survey determined:

The United States is in a parking revolution as sweeping changes are made due to new technologies that make it easier for people to:

- find and pay for parking, and

- for parking authorities to manage it.

Why Parking Pilots

Identify Best Technology and Solutions

Evaluate How Technology Works

Meet Parking Program Goals

Identify Best Technology and Solutions

Clarify What Technology Options are Available:

- Parking Technology is rapidly changing
- The new technology built to fit client and end-user needs
- End-users expect parking to be a service- What would parking look like if it was run by Nordstrom's?
- Parking is a portion of a concept BMW has coined as "personal mobility"

City of Dallas Current Parking Technology

Basic Meter
- Coin and Pay-by-Phone
- 4, 200 Coin Meters Approx.

IPS Meters
- Coin, cash, credit card & Pay-by-Phone
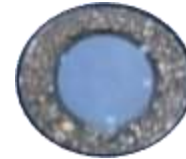- 100 Meters Approx.

Multi-space Meters
- Coin, cash, credit card & Pay-by-Phone
- Located at Klyde Warren Park Service Road and Main Street Garden

Pay-By-Phone
- Credit card
- All Meters and Parking Lots

Examples of Available Parking Technology

Sensor Technology

Parking Data Applications

Electronic Parking Guidance Systems

Near Field Communication (NFC) technology

Smart Parking Systems

Trend to real time information, big data analytics, and integrated systems:

- Intelligent Transportation Systems(ITS)
- Complete Streets
- Smart Technology (On-street/ in-vehicle/ mobile apps)

Pilots and Programs to Watch

- SF Park (San Francisco)
- Express Park (Los Angeles)
- Seattle
- Mobility Transformation Facility (University of Michigan)

Current and Future Parking Trends

- Integrated Parking Management Systems – meter to management
- Car Share/Ride Share
- Multi-use spaces
- Autonomous Vehicles (sensing/integrated)
- Connected Cities

"We are on the cusp of a transformation of mobility on a scale we haven't seen since the introduction of the automobile a century ago."
Peter Sweatman - Director, U-M Mobility Transformation Center

Meet Parking Program Goals

Dallas Parking Goals:

- Improved Customer Service
- Enhanced Operational Efficiency
- Better Revenue Management

Guiding Principles for Parking Services:

- Provide safe public parking
- Adequate availability of parking (85% occupancy rate)
- Provide accessible public parking
- Use technology/parking practices for effective parking management
- Create aesthetically pleasing and functional parking
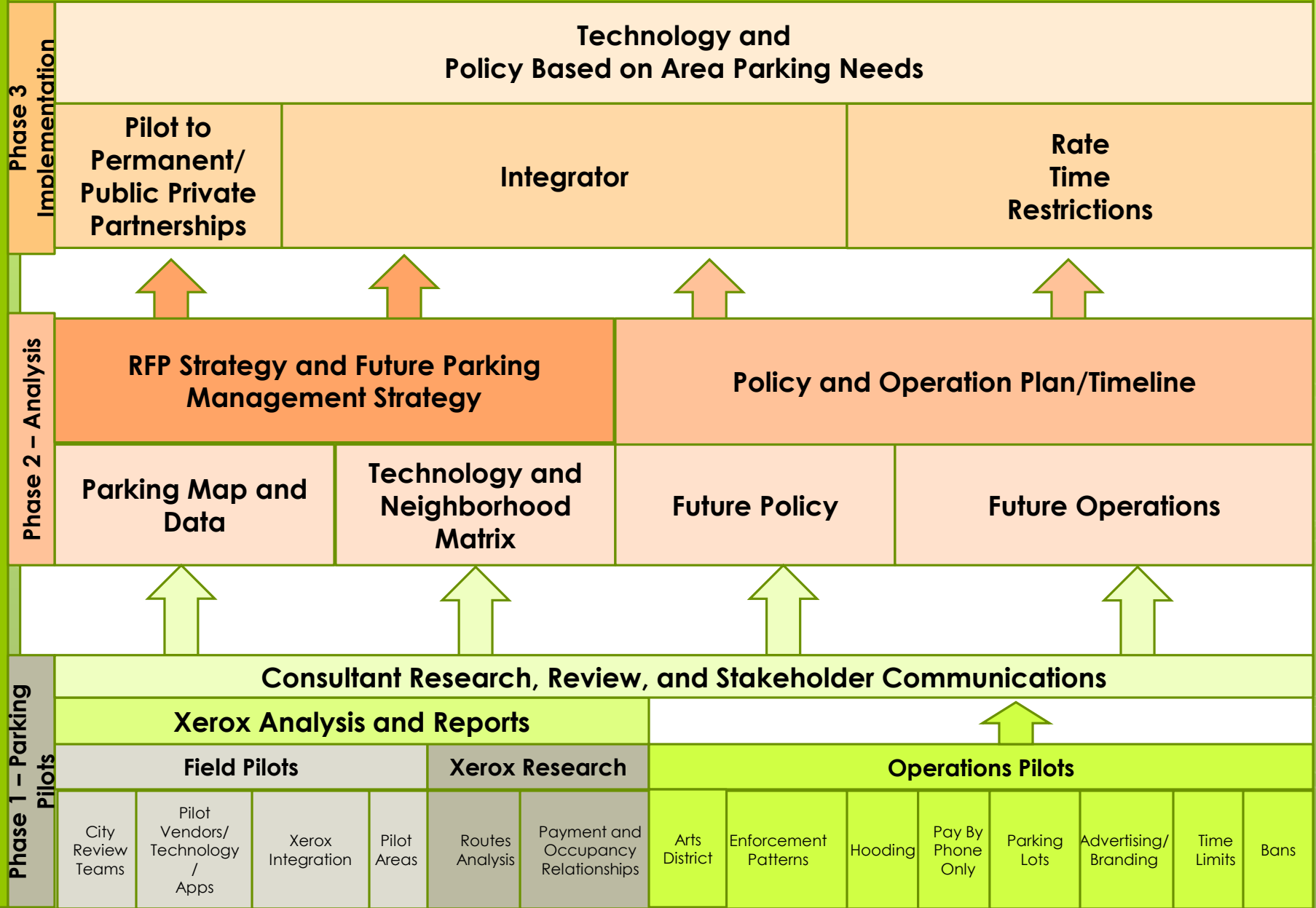- Generate revenue to support public parking

Avoid Failure

- Why Park, if it is a hassle? Parking Impacts trip decision process:
  - Decision to park: Do I want to drive and park?
  - Search for Parking: Will there be parking spaces?
  - Understanding signage: Can I find the parking?
  - Paying for Parking: How much will it cost and do I have change?
  - End Trip: Do I need to leave early because my parking time/money has ended?

- Negative publicity inhibits future parking changes
  - Chicago Upfront payment contract
  - Indianapolis/Cincinnati revenue expectations

Guide the RFP Process (Consultant & Pilot Program)

- Type of Parking Services:
  - Turnkey Parking Management Services
  - Integrator for back-end office operations and reporting
- How Technology is picked:
  - Contractor's selected/preferred vendors
  - Open forum vendors with forced back-end integrations
- Parking model or hybrid model for pricing plans/technology/policy/servi ces
- Create Technology road map for selected technology, future technology, and implementation
- Smart RFP to increase data and consumer options

Parking Modernization

Phase 3 – Implementation

Technology and Policy Based on Area Parking Needs

Pilot to Permanent/ Public Private Partnerships	Integrator	Rate Time Restrictions

Phase 2 – Analysis

RFP Strategy and Future Parking Management Strategy	Policy and Operation Plan/Timeline

Parking Map and Data	Technology and Neighborhood Matrix	Future Policy	Future Operations

Phase 1 – Parking Pilots

Consultant Research, Review, and Stakeholder Communications

Xerox Analysis and Reports

Field Pilots				Xerox Research		Operations Pilots							
City Review Teams	Pilot Vendors/ Technology / Apps	Xerox Integration	Pilot Areas	Routes Analysis	Payment and Occupancy Relationships	Arts District	Enforcement Patterns	Hooding	Pay By Phone Only	Parking Lots	Advertising/ Branding	Time Limits	Bans

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Vision
Plan
People

Parking North Texas