

MWPVL International
Supply Chain | Experience

Same Day Delivery
Service : Are You
Ready for This Game
Changer?

**SURFACE
TRANSPORTATION**
2014 *Summit*

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11:45 am EDT, Oct. 15, 2014



Agenda

Abstract & Background Information on MWPVL International

E-Commerce Retail Wars

General Discussion and Questions

- Same Day Delivery is a game changer that Amazon is rapidly deploying within North America. It is the highest level of customer service but it comes at a steep price tag. This presentation, to be provided by one of the leading experts in this space, provides a detailed look at the distribution networks and e-commerce fulfillment strategies of major retailers including Amazon, Walmart, Target and Others. If you are seeking to understand the cost structure and challenges associated with same day delivery then this is a session not to be missed.

About MWPVL International

- We are consultants in Supply Chain and Logistics
 - Founded in 2006
 - 5-Year CAGR 25%
 - Offices in Montreal, Boston, Seattle, Kingston
 - 200+ projects completed
 - Consulting Services:
 - Supply Chain / Logistics / Flow Path Strategy
 - Material Handling, Automation & Simulation
 - Distribution Center Design, Reset & Implementation
 - Supply Chain Execution Technology
 - Operational Assessment
 - Insourcing & Outsourcing
 - Procurement & Forecasting

Qualifying Statements

- **MWPVL** is strictly unbiased in its views and opinions towards the companies discussed in this presentation
- Any errors or omissions are unintended and we have made every effort to report accurate information
- We have not received payment of any kind to prepare and present these materials

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It's Becoming a Mad, Mad, Mad, Mad World Out There



Tomorrow is just not fast enough anymore...

E-Commerce Retail Wars

- Amazon's unprecedented growth and emergence as the global leader in B2C E-Commerce Retail has placed tremendous pressure on traditional retailers to quickly develop a coherent eCommerce strategy that involves significant technology and infrastructure spending
- Amazon's rapid push towards same-day order fulfillment raises the bar even higher for competitors since this is the highest possible service level that cannot easily be achieved
- It is not clear how much consumers are willing to pay for same-day delivery/similar services
- It is clear that the demand is there and that the competition among major players is intensifying



➤ Amazon Prime:

- \$99/year membership
 - \$299/year for Prime Fresh membership (Seattle, LA, San Francisco)
- Free 2-day shipping on millions of eligible items with no minimum order size; for all other items, standard or no-rush shipping is also free
- Amazon Locker service is also free
- Same-day shipping currently offered in 15 metro areas
 - For Prime members, it costs \$5.99 per same day shipment
 - For non-members it costs \$8.99 per shipment + \$0.99 per item
- Cut-off times vary from 7am to 12:15pm
- All same day deliveries arrive before 9pm

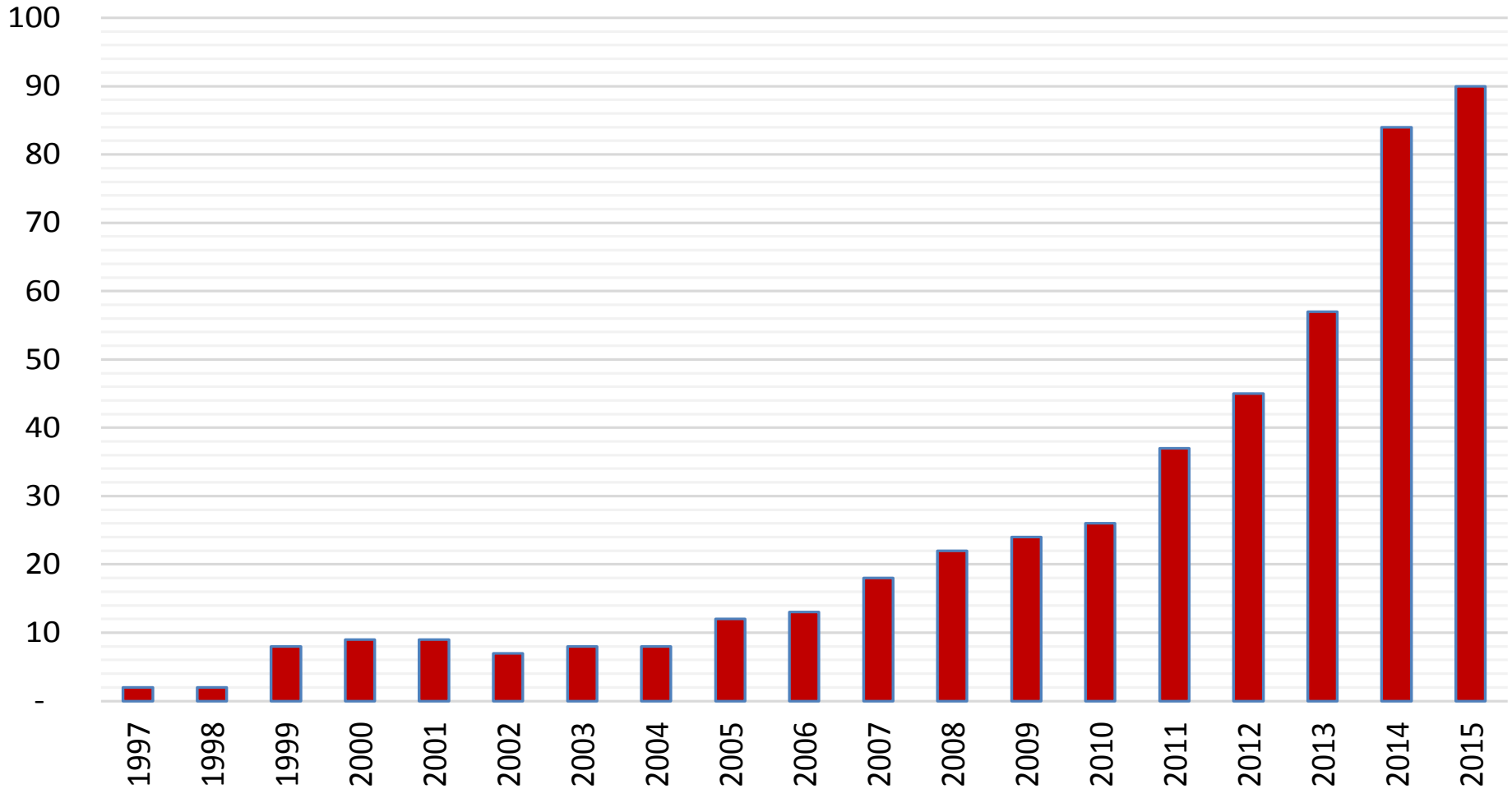
Amazon Same Day Shipping Capability Today

- 23% of NA market currently has same day delivery service
- We estimate this will increase to 29% by end of 2015

City Pop. Rank	Name	Metro Area 2012 population	Closest Amazon Fulfilment Center	Distance (Miles)	Currently Same Day?
1	New York City	18,718,000	Robbinsville, NJ	64	Y
2	Los Angeles	12,298,000	San Bernardino, CA	60	Y
3	Chicago	8,814,000	Kenosha, WI	66	Y
6	Philadelphia	5,392,000	Middletown, DE	57	Y
7	Dallas–Fort Worth	4,655,000	Haslet, TX	40	Y
8	Boston	4,361,000	Windsor, CT	103	Y
10	Atlanta	4,304,000	Chattanooga, TN	118	Y
11	Washington DC	4,238,000	Baltimore, MD	43	Y
14	Phoenix	3,416,000	Phoenix, AZ	0	Y
15	San Francisco–Oakland	3,385,000	Tracy, CA	62	Y
16	Seattle	2,989,000	Dupont, WA	47	Y
23	Baltimore	2,205,000	Baltimore, MD	0	Y
29	Riverside-San Bernardino, California	1,690,000	San Bernardino, CA	0	Y
30	San Jose, California	1,631,000	Tracy, CA	53	Y
36	Indianapolis	1,387,000	Indianapolis, IN	0	Y
Subtotal Amazon Same Day					79,483,000
Total Population in USA and Canada					351,931,000
% Population Same Day					22.6%

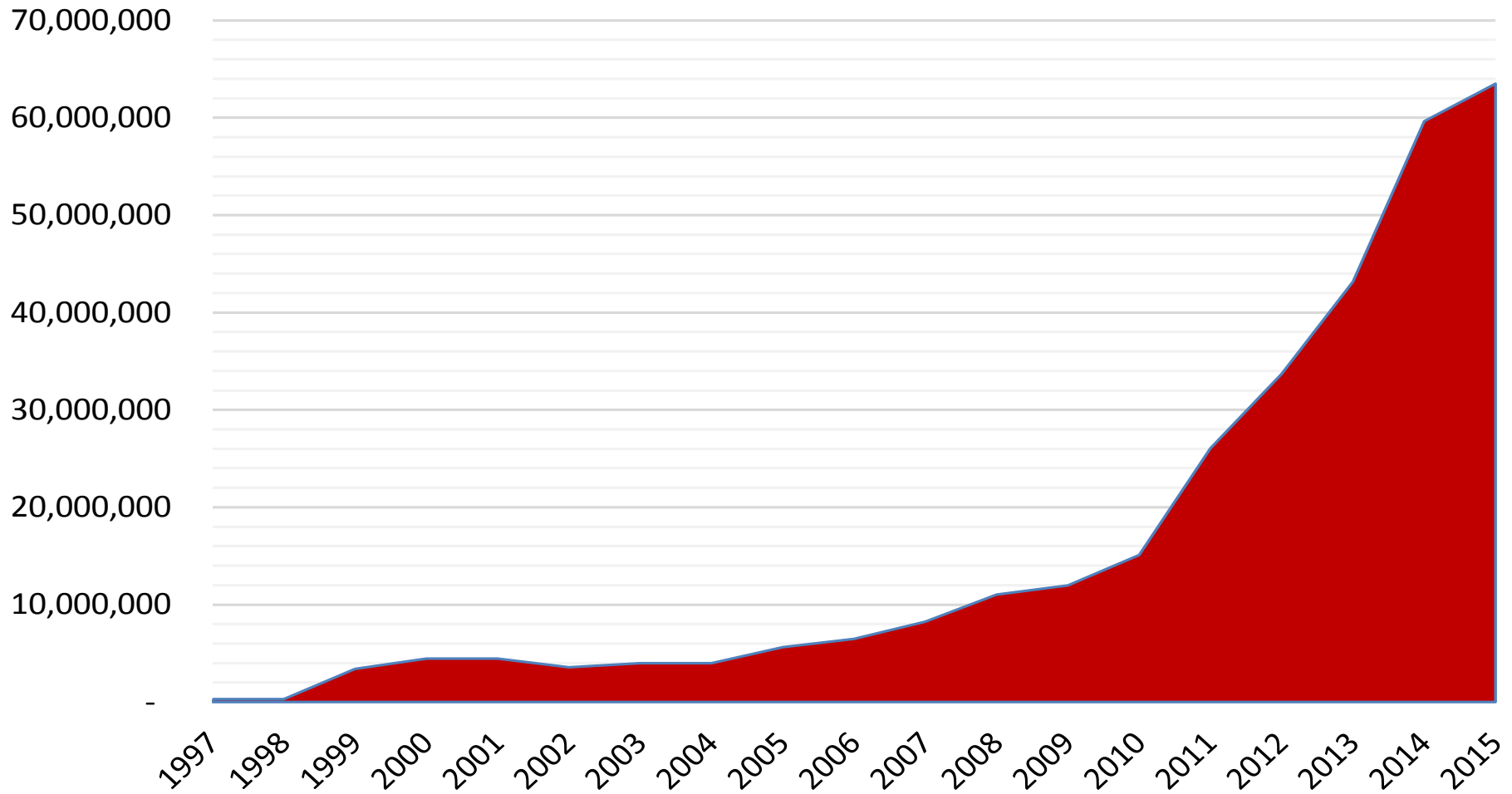
Amazon Fulfillment & Sortation Centers in North America

Amazon Fulfillment & Sortation Centers in North America



Amazon North American DC Square Feet

Amazon Fulfilment & Sortation Center Sq Ft in North America



Amazon Fulfillment Center Network

63 Active Facilities and 9 Set to Open by YE 2015

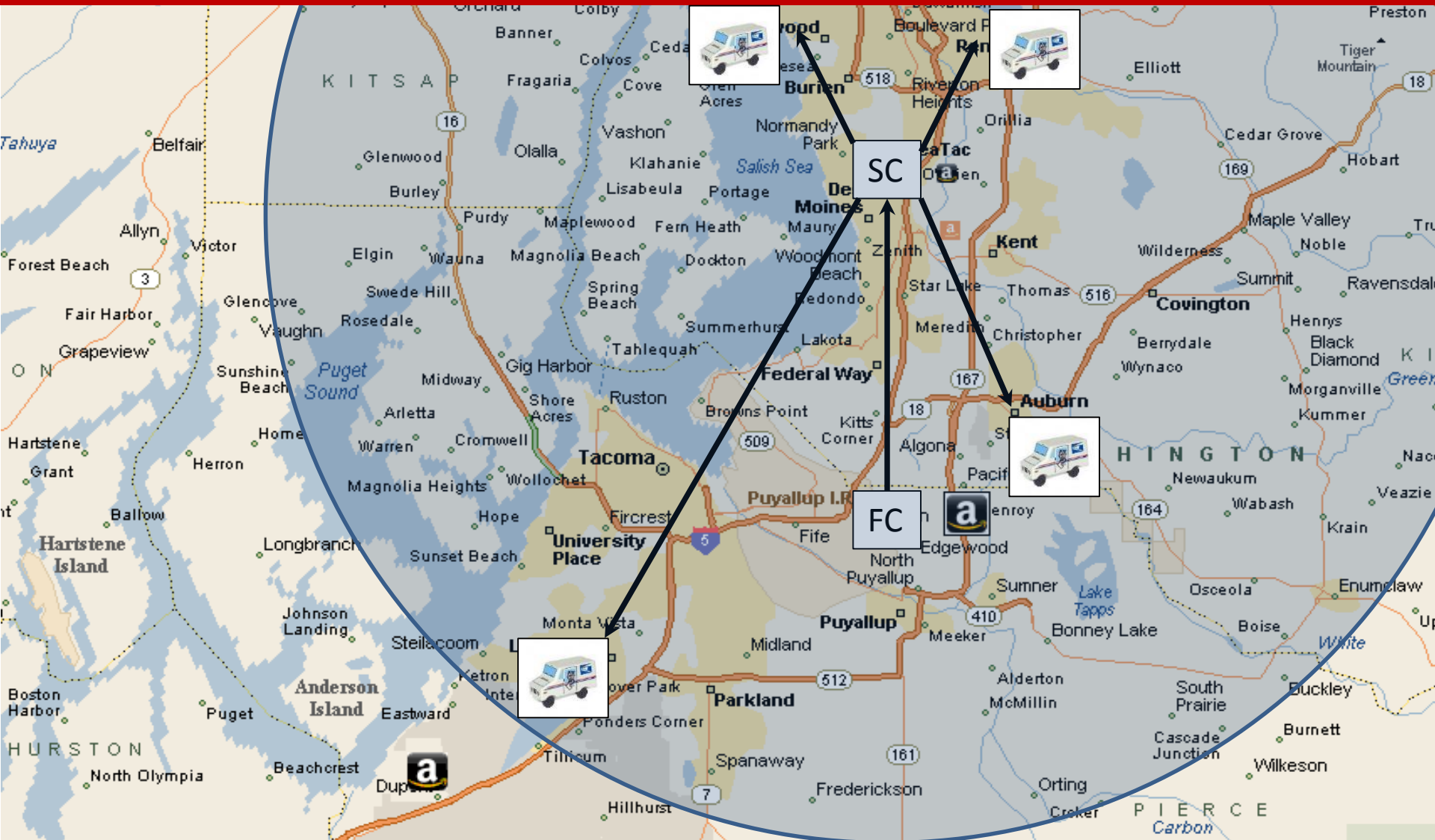


Amazon Sortation Center Network Build-Out 2014-2015

18 Locations Announced and More to Follow



Amazon FC → SC Hub and Spoke Network – How It Works



Key Trend Line to Watch (Mix of 1P and 3P Fulfillment Expense)



Amazon and the Impact of Same Day on the Market

- In the medium to long term, as Amazon enables same-day and next-day shipping into the top 20 - top 50 US markets, this will drive more market share away from traditional retailers to Amazon
- It also raises the competitive bar for other e-commerce retailers
- Lastly, it drives parcel shipments away from UPS and FedEx towards USPS and other regional courier companies
 - This represents a major opportunity for mail carriers to increase revenues by supporting package delivery during weekday evenings and weekends

Amazon Wants FAA Approval to Begin Drone Testing by 2015



Back on Earth, Deutsche Post's New Mail Delivery Vehicles



Google Shopping Express



Google Shopping Express

- Google Shopping Express officially launched in San Francisco in April 2013
- Now expanded to San Jose/Bay Area, West LA & Manhattan
- 10 – 20 national and local retailers participating
- New subscribers get free 3-month trial & unlimited same day delivery service
- Members get free delivery for orders \$15+ or \$3 for orders < \$15; Add \$5 for non-members
- Customer places order and specifies 4-hour delivery window
- May be moving to membership fee of \$90/yr (or \$8/month)
- Fresh produce, alcohol, and refrigerated goods on the way



Google's Project Wing Being Tested in Australia



eBay Now



eBay
MOTORS

- eBay Now is a service introduced in 2012
- Use couriers as local valets to pick-up and deliver items in under **2 hours**
- Partnered with 100's of top national retailers
- Service offered in San Francisco and the Peninsula, San Jose, Chicago, New York (Manhattan, Brooklyn, Queens), and Dallas
- Service costs \$5 per order
- Minimum order size is \$25
- Plans to expand service to 25 cities by end of 2014 have been shelved in an about-face change in strategy previously announced in 2013



Walmart “To Go” Service

- Walmart now testing online GM/Grocery shopping in Denver in 11 stores
- Offers customer the choice of same day home delivery service or local store pickup
- Same day delivery of grocery being tested in San Jose & San Francisco since 2011
- Same day delivery of GM being tested in Northern VA, Philadelphia, Minneapolis, San Jose and San Francisco since 2012
- Walmart charges \$5-\$7 per order with minimum order size of \$30



Walmart has a U.S. Network of 3658 Large Format Retail Stores (2012)



Walmart.com Fulfillment Strategy

➤ Walmart.com is as a separate business unit and the company is investing \$430 Million into its e-Commerce platform

The Walmart.com logo is displayed in a blue, sans-serif font. The text "Walmart.com" is followed by a small "SM" trademark symbol.

- Walmart.com already operates 2 dedicated e-fulfillment DCs in Bethlehem, PA and Fort Worth, TX with a 3rd facility to come online in Indianapolis, IN
- Walmart's hope is to use its thousands of stores not just as potential pick-up locations (order on-line, pick up in store) but as the base for local e-fulfillment
- Offering a locker approach in its own stores so that the customer need not go to a service desk (This has been a source of complaints due to lengthy wait times)

- Testing same-day delivery in 3 markets
 - Offering \$10 rush delivery service in Minneapolis, Boston, and Miami
 - Ability to order as late as 1:30 p.m. and receive same day delivery of qualifying items between 6 - 9 pm
- Target also plans to rollout standard shipping from 136 stores in 38 markets across the USA
 - Company plans to leverage its store network as fulfillment centers to offer 1-2 day shipping for items not previously available from Target.com.



- Macy's launching a pilot program for same day delivery service in Fall, 2014
 - Aimed at customers in 8 markets
 - Chicago, Houston, Los Angeles, New Jersey, San Francisco, San Jose, Seattle and Washington, D.C.
 - Uses crowdsourced same-day delivery provider Deliv
 - Macy's is also turning all of its brick-and-mortar locations into mini-fulfillment centers to ship online orders from the nearest store to the consumer
 - Now the 8th largest e-Retailer in the US
- The Bloomingdale's chain will also offer same-day shipments in Chicago, LA, San Francisco and San Jose.





- Instacart - grocery delivery service in 1-2 hours
- Instacart serves Costco, Kroger, The Food Emporium, Super Fresh, etc.
- Recently announced partnership with Whole Foods
 - Test pilot to start in Austin and Boston
 - Service to expand to 15 cities currently served by Instacart:
 - Atlanta; Austin; Boston; Boulder; Chicago; Denver; Houston; Los Angeles; New York City; Philadelphia; Portland, Oregon; San Francisco; San Jose; Seattle and Washington, D.C.
- \$4 for 2-hour delivery; \$6 for 1-hour - min. \$35+ order
- \$8 for 2-hour delivery; \$10 for 1-hour – below \$35 order

Sample Same Day Delivery Cost Structure

Operating Expense Variable	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5
Stem Miles to Delivery Network (Miles)	10	25	50	75	100
Average Stem Miles in a Typical Day	20	50	100	150	200
Average Stop Miles in a Typical Day	130	116	94	72	49
Average Miles Driven in a Typical Day	150	166	194	222	249
Average Deliveries per Driver per Day	120	108	87	66	46
Average Minutes Between Deliveries	4.00	4.47	5.52	7.24	10.55
Cost per Day for Vehicle Expenses	\$165.00	\$183.10	\$213.68	\$244.01	\$274.22
Variable Cost per Day for Vehicle + Driver	\$442.34	\$460.45	\$491.02	\$521.35	\$551.56
Fixed Cost Allocation per Day (Assume 10%)	\$44.23	\$44.23	\$44.23	\$44.23	\$44.23
Total Operating Expense per Day	\$486.58	\$504.68	\$535.25	\$565.58	\$595.80
Operating Expense per Same Day Delivery	\$4.05	\$4.69	\$6.15	\$8.53	\$13.09

➤ Key criteria for success at same day:

- Maximize the number of deliveries per route (i.e. density)
- Minimize distance from DC to market being serviced
- Minimize distance between stops

Conclusions

- Amazon is raising the bar with its massive push towards same day fulfillment to the top 50 US markets
- Many companies testing pilots and the results range significantly - but it's too early to say where this is all going
- It's not clear if customers are willing to pay a premium for same day delivery service or if this appeals to a small subset of the population
- It is clear that there is a market demand for the service and the challenge is for retailers to develop a same day delivery strategy that does not result in margin erosion
- Lastly, same day will drive volume away from on UPS and FedEx towards mail carriers and existing / upstart local courier companies

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