



## Walmart Transportation

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Senior Director Transportation

Supporting Supply Chain in the  
Washington DC Market

# Walmart Formats & Banners

27 Countries

9 Formats

53 Banners

61 Logos

48 out of 53 ( 91 %) banners do not reference the word "Walmart"

## COUNTRIES ►

US, Puerto Rico, Canada, Brazil, Argentina, Mexico, Chile, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, China, Japan, India, UK

### Hypermarket



### Compact Hypermarket



### General Merchandise



### Supermarket



### Soft Discount



### Membership



### Restaurant



### Apparel



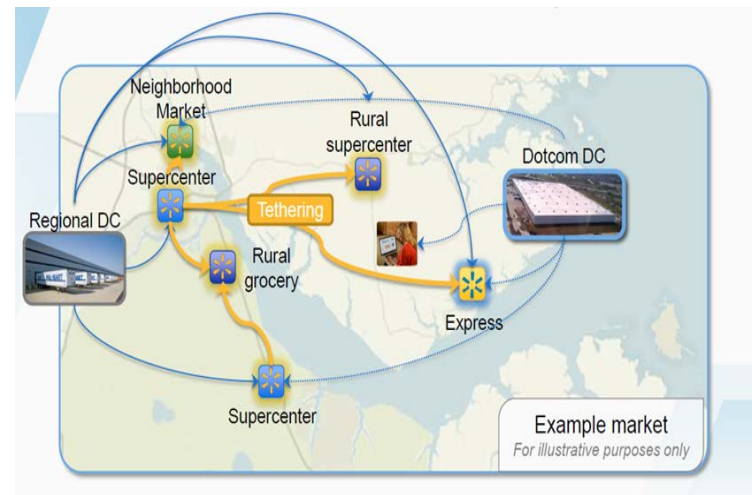
### Cash & Carry



# Walmart Stores Inc.



- Walmart celebrates 50-year Anniversary in 2012
- Doug McMillon named CEO in 2014
- Current store count – 11,000...and growing!
- Small Format stores
- E-commerce expansion
- Tethering
- Market Eco-System
- Continued Change!!





# Walmart Private Fleet Key Stats



**58,000 Trailers**



**6,100 PF Tractors  
4,350 CCOB Tractors**



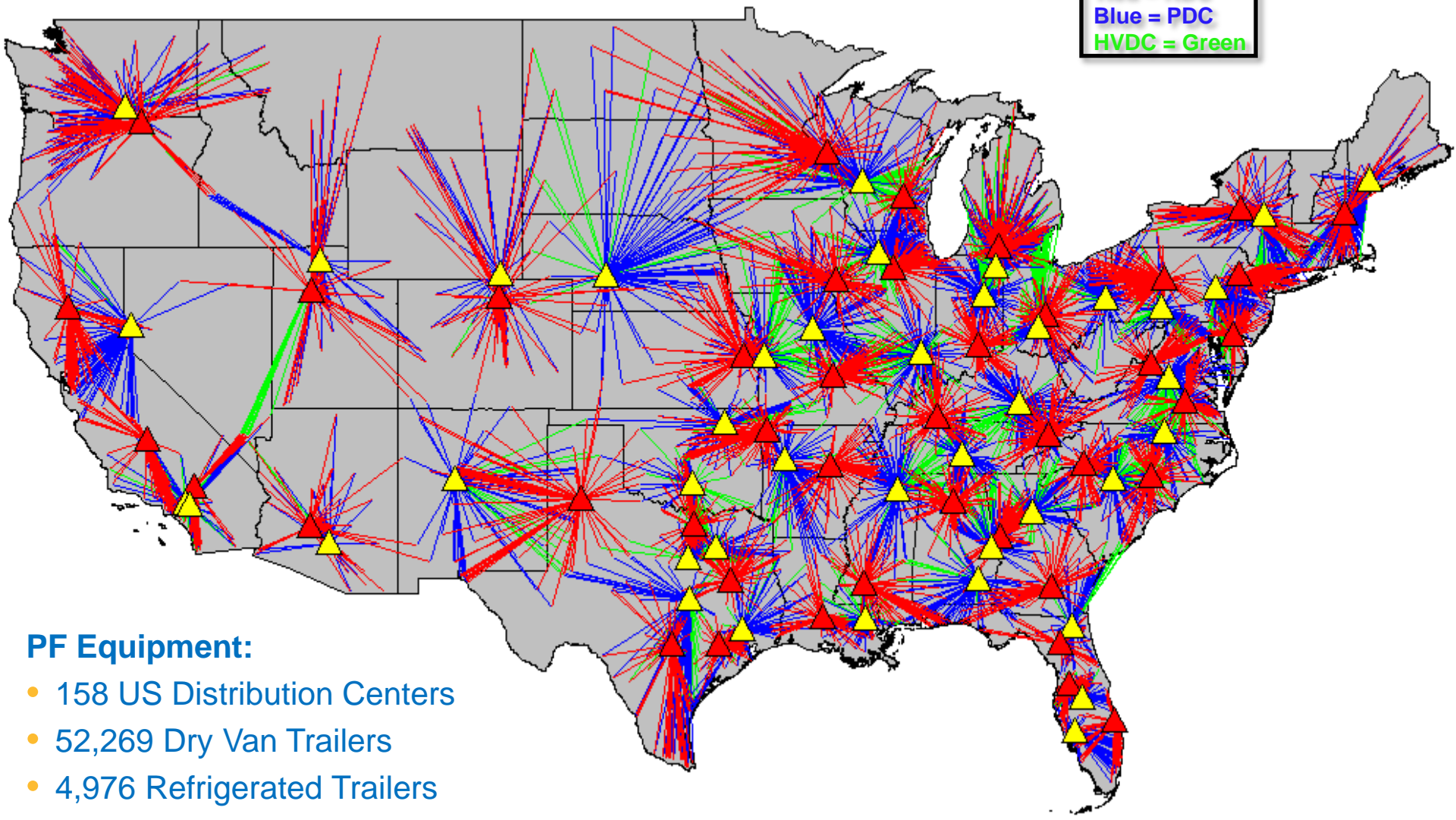
**7,300 Professional Drivers**



**700,000,000 Miles / Year  
425,000,000 CCOB Miles**

# Walmart Regional & Grocery Distribution Center to Store Alignment

Red = RDC  
Blue = PDC  
HVDC = Green

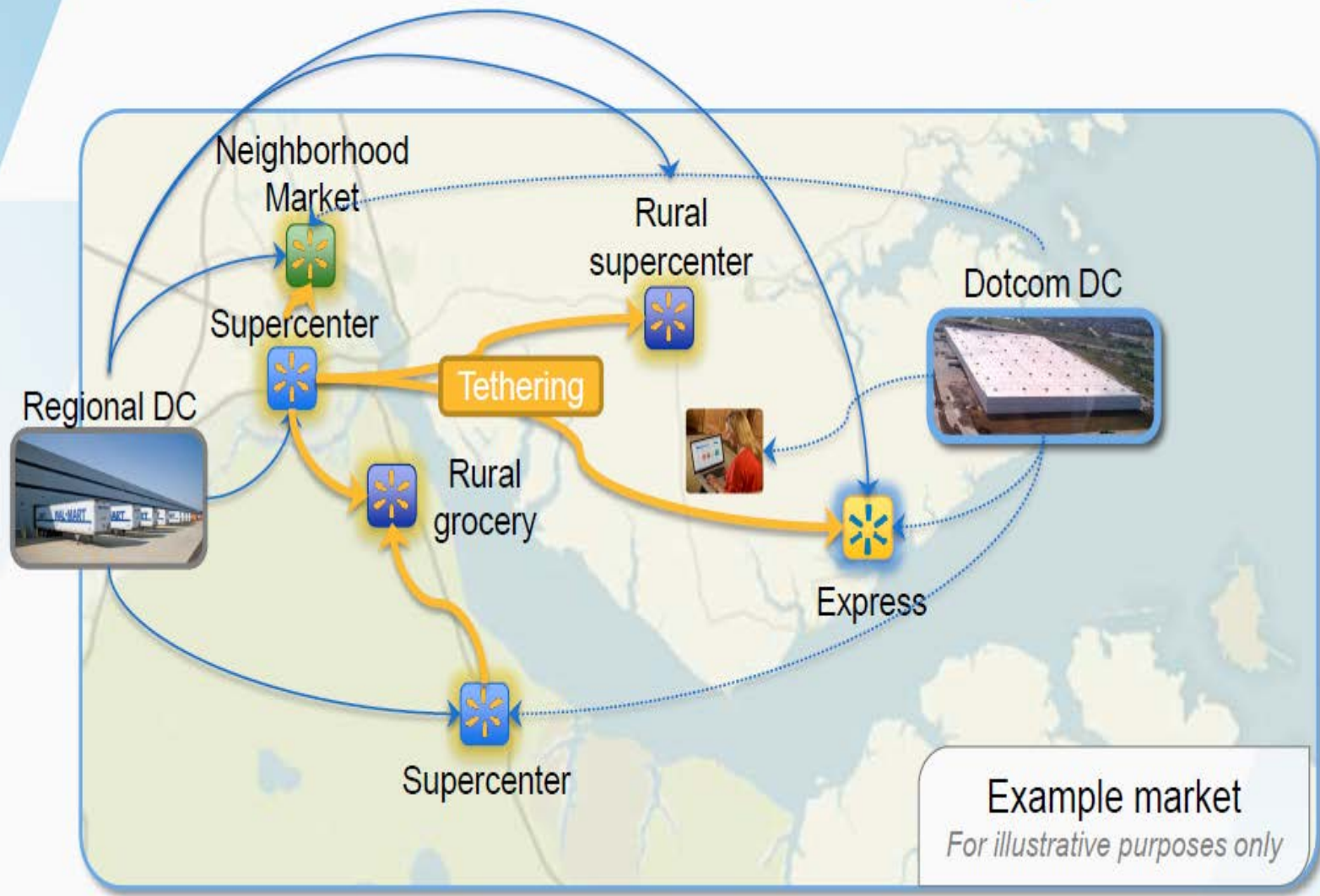


## PF Equipment:

- 158 US Distribution Centers
- 52,269 Dry Van Trailers
- 4,976 Refrigerated Trailers

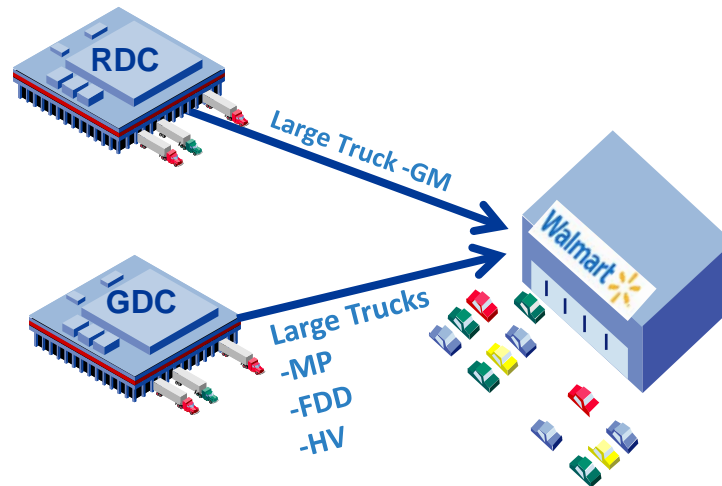


# Our vision for the market ecosystem



## Deliveries are Commodity Based

- ▶ RDC – Regional Distribution Center – General Merchandise (non-perishable) Some Dry Consumables
- ▶ GDC – Grocery Distribution Center- All Perishable Goods & Dry consumables



# Working Together to DO More with Less

## Fill the trailer

- Improve Packaging
- More efficient loading
- Delivery Schedules

## Improve Routing

- Ensure full trailers
- Drive shorter, safer and smarter routes
- Reduce out of route excess mileage

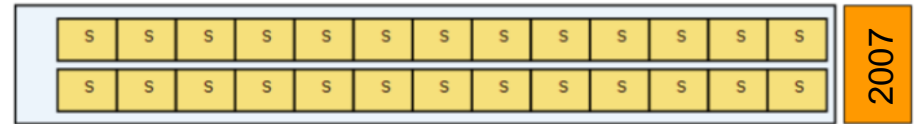
## Reduce Empty Mileage

- Increase vendor backhauls
- Integrate into the grocery business
- Optimize network design

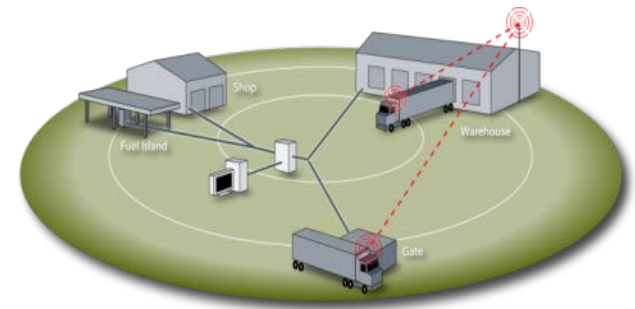
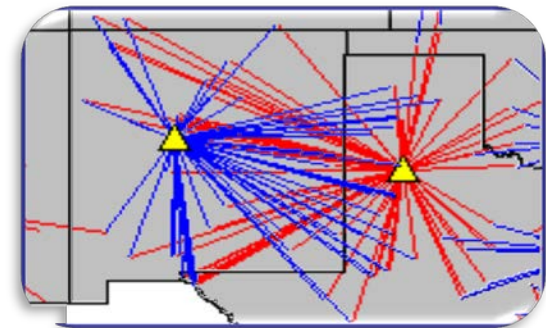
## Deploy Innovative Technology

- Enhance dispatching tools
- Gain metrics visibility through dashboards
- Deploy network optimization software

Straight (26 pallets)

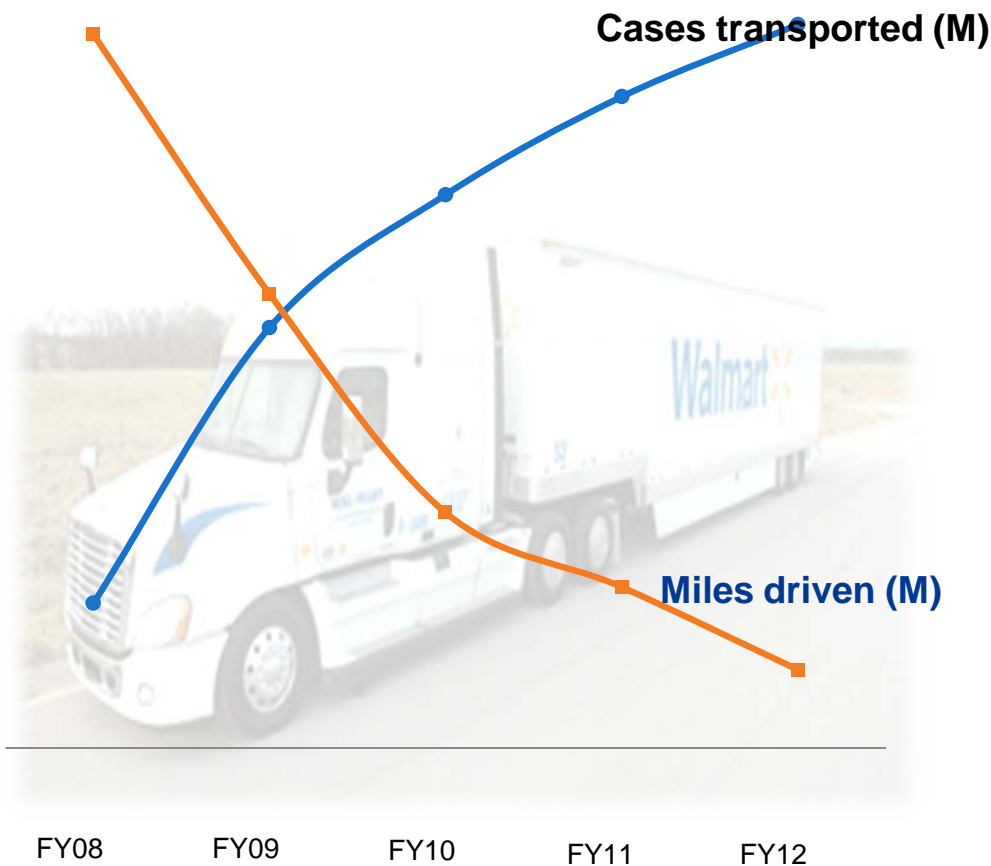


100% Turned (30 pallets)





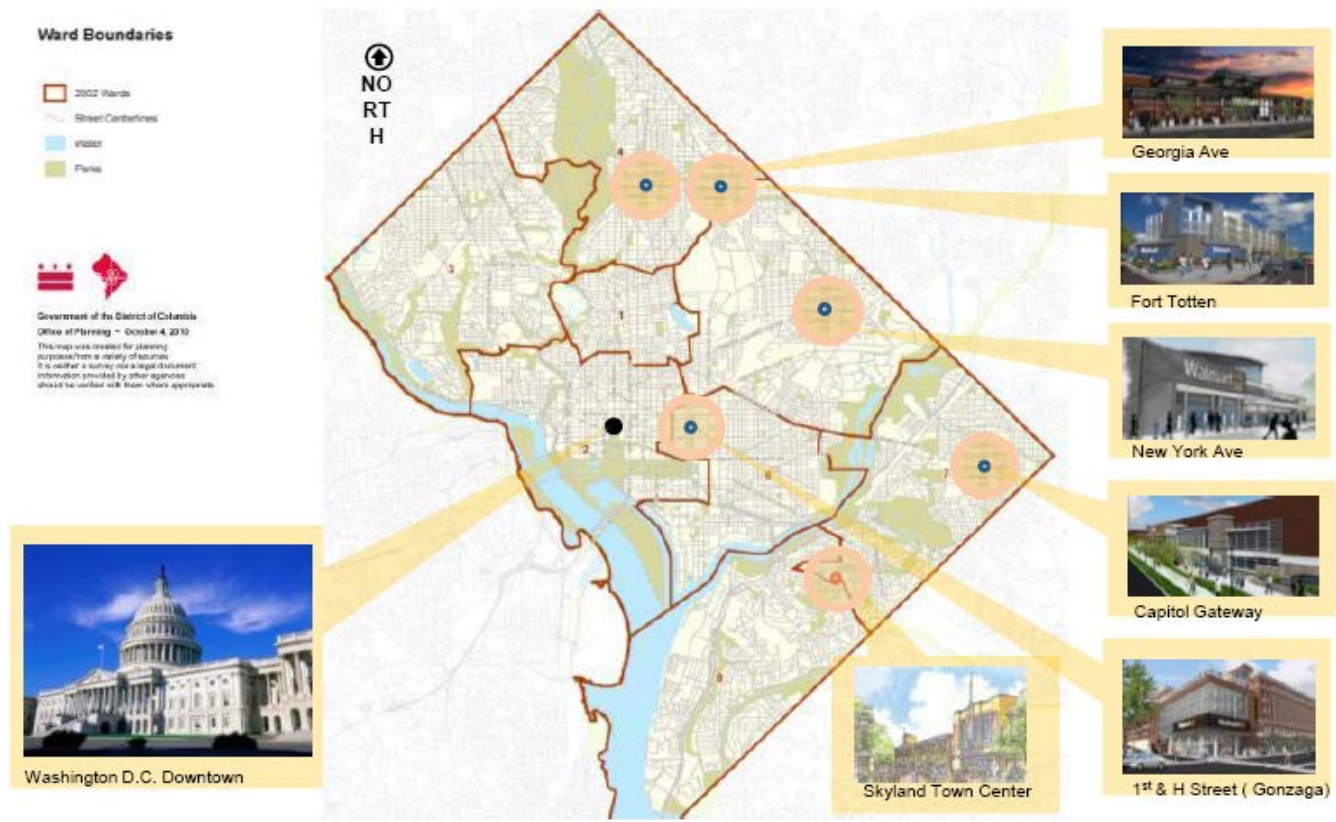
# Logistics continues to deliver savings



- Productivity initiatives
  - Cases per trailer
  - Routing improvements
  - Empty mile reductions
  - Packaging
  - Alignments
- **361 million more cases shipped**
- **287 million fewer miles driven**

Note: Performance based on Walmart fiscal years

## Washington, DC Entry Plans



Traffic Flows – Delivery Times

# WASHINGTON DC CHALLENGES



# Transportation Outbound Cost to Serve –

## EDLC = EDLP

Outbound Cost to Serve depends on multiple physical factors.

Objective is to maximize store service and minimize overall cost.



### Trip Cost

- Overall Distance--shorter distance is less expensive
- Trailer size--larger is less expensive overall (economies of scale)
- Delivery windows--wider windows increase ability to share trip cost with other stores
- Stops per trip—fewer stops are less expensive (however, multi-stop deliveries can fill trailers to share costs across multiple stores)
- Backhaul Availability (standard equipment required)—significantly reduce overall trip cost



### Amount of Merchandise\* (fuller trailers drive down freight factor %)

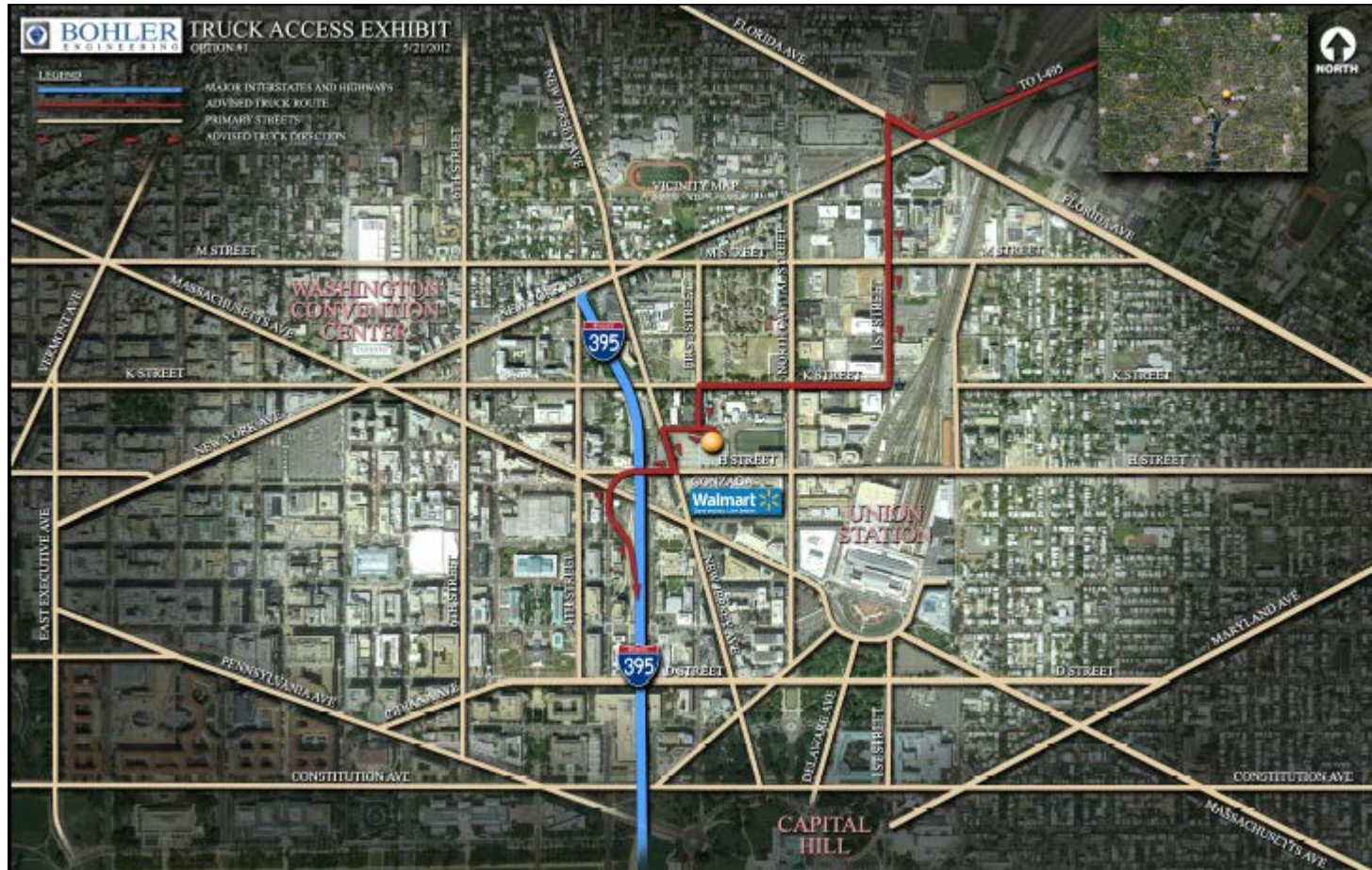
- Sales level
- Delivery frequency
- Combine with other stores to fill trailers and share trip cost



### Special Handling (not shared by other stores on trip)

- Substandard access and/or no dock
- Specialized equipment (adds cost and limits backhaul and multi-store delivery ability)
- Other restrictions/limitations

# “H” Street Truck Route



# “H” Street Delivery

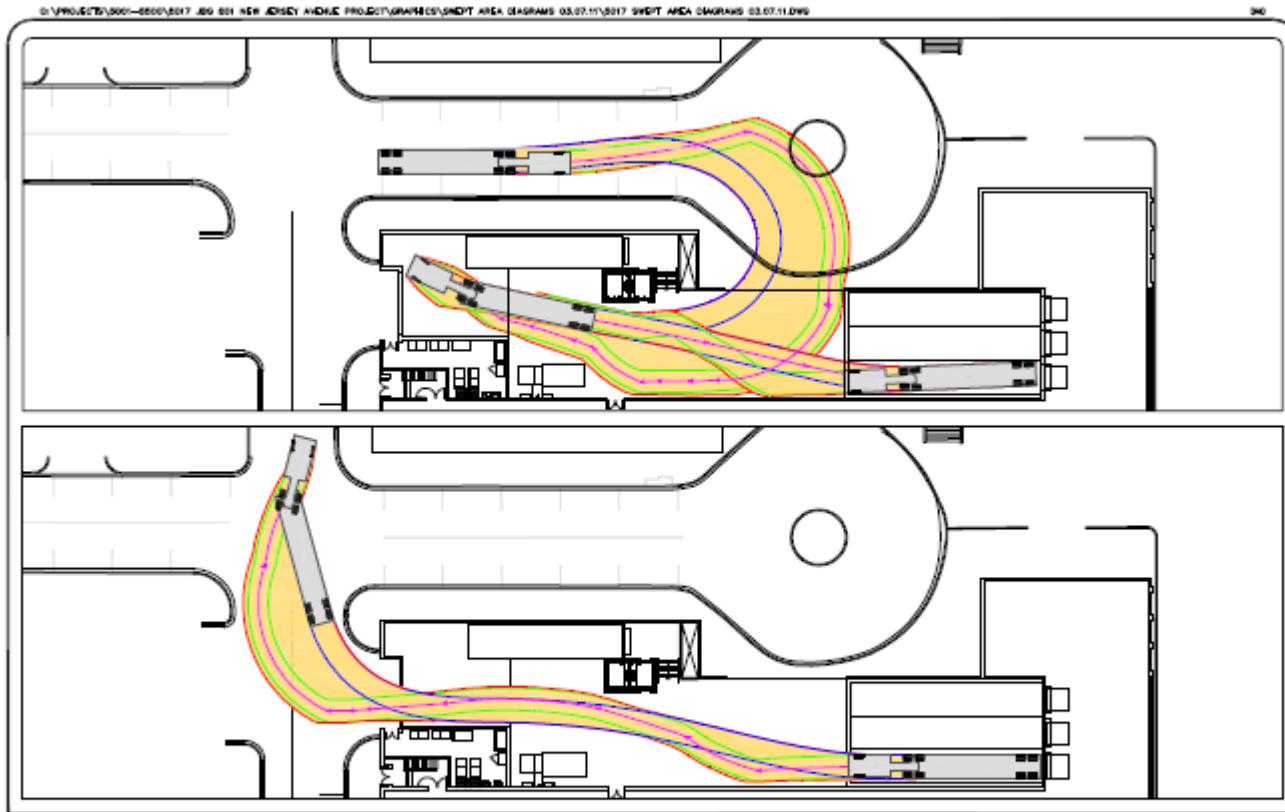



Figure 3  
68.5' (WB62) Swept Area Diagram

- Vehicle Body
  - Front Tire Tread
  - Rear Tire Tread
  - Directional Path
  - Vehicle Path
- North

J95 801 New Jersey Avenue  
Washington, D.C.

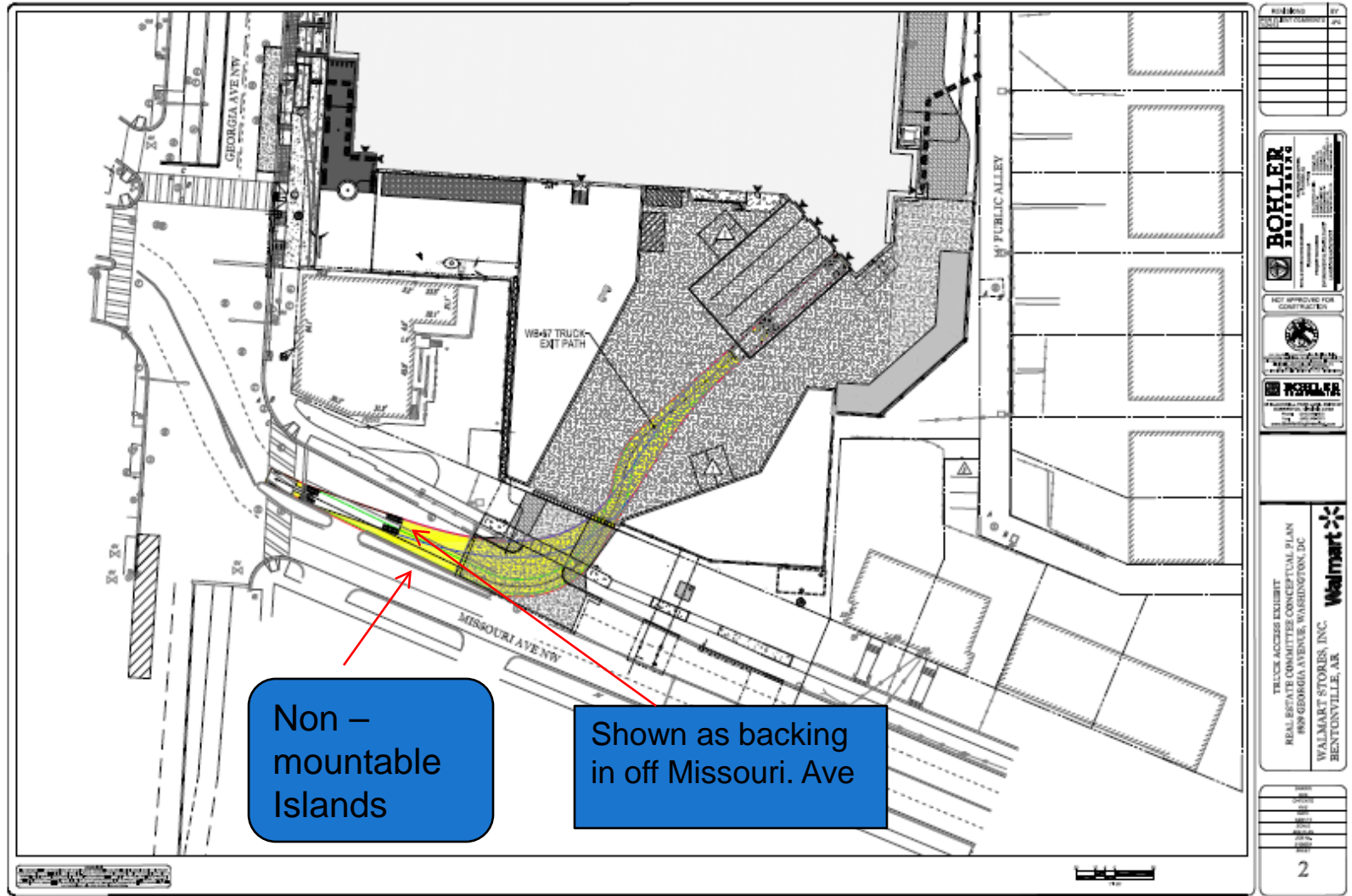
 Wells + Associates, Inc.



# Georgia Ave. Truck Route



# Examples of Schematics - Georgia Ave. Delivery



Strategic outlook

# FUTURE IN WDC FOR WALMART

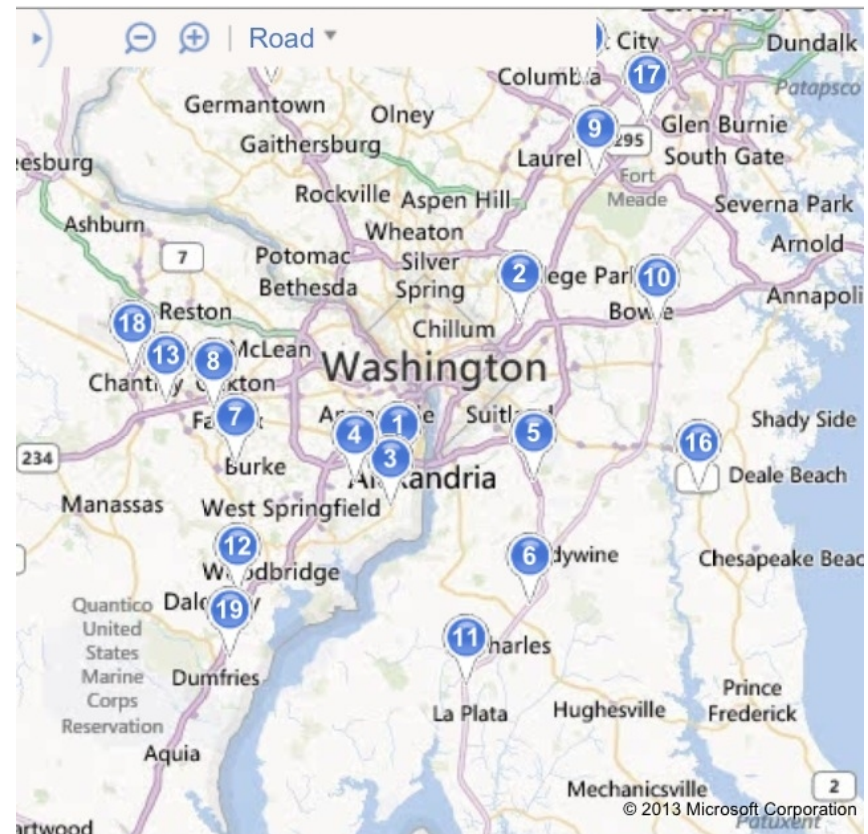


# Improving Freshness & On Shelf Availability in Washington DC



## Washington D.C. Urban Store Count – How do we maximize density?

- **Plans for 5 Metro Walmart Supercenters in Washington DC**
- **26-30 Walmart Stores in Metro Market**
- **Roughly 70 to 100 daily deliveries in the Metro Market**



Saving Money to Help People Live Better

# **EMERGENCY OPERATIONS & COMMUNITY SUPPORT**



## When Disaster Hits





# Fleet Responds - Katrina Convoy



# Community Volunteerism

- Community Volunteer
- Food Banks
- Salvation Army
- Wreaths Across America
- Victory Junction - \$401K
- Race for the Cure
- Children's Hospitals - \$441K
- Walmart Heart
- Safe Miles Local Education - \$130K



# NEW TECHNOLOGY

# Concept Truck

## Walmart Advanced Vehicle Experience Concept Truck

- Prototype advanced turbine powered, range-extending series hybrid powertrain, which includes a range-extending turbine, a battery storage system and an electric motor

- A trailer made almost exclusively with carbon fiber, saving around 4,000 pounds



- Convex trailer nose adds to aerodynamics and increases storage space inside the trailer



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#WMTGreen

- Centered driver's seat



- Electronic dashboard with customizable gauges and performance data

- Comfortable full-size sleeper



- Sliding driver's door



Questions?

# Thank you