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Category Management of Services: A Method for Strategically Clustering DoD Installations

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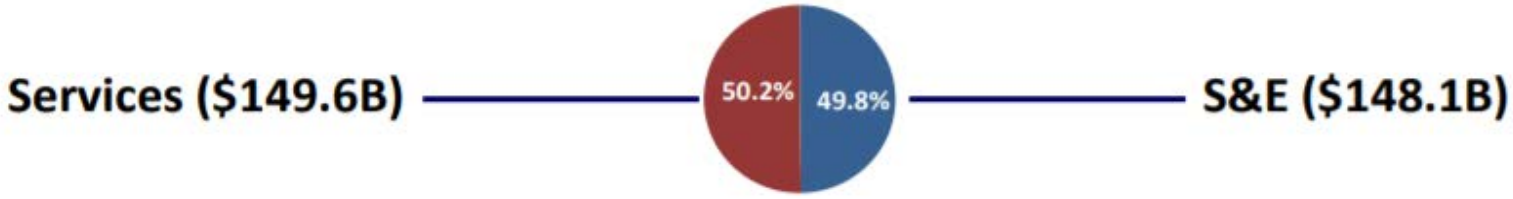
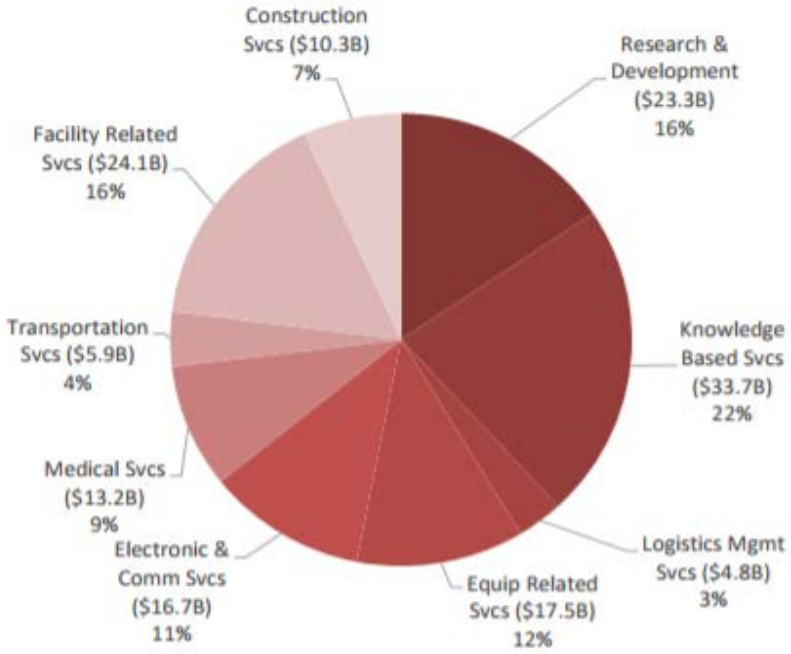
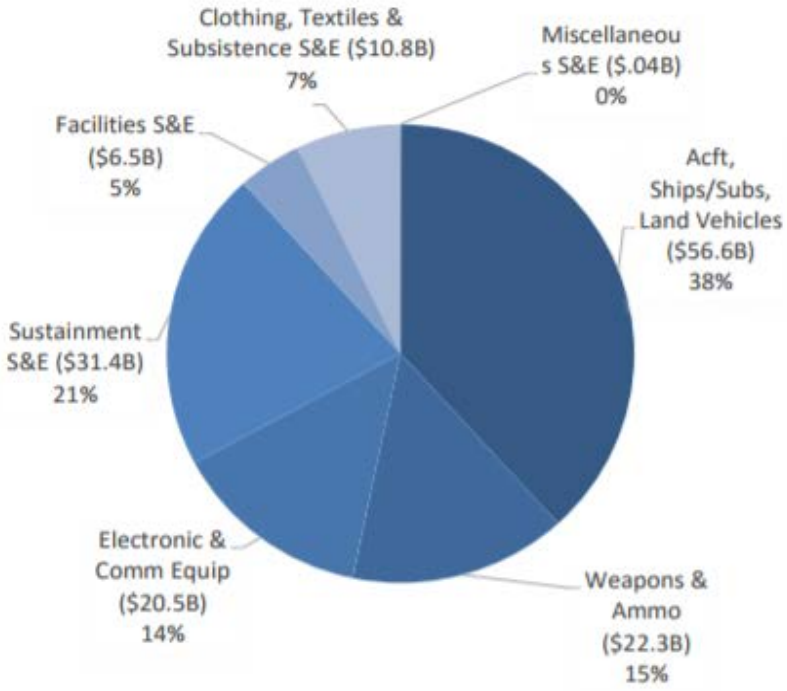
The Service Economy







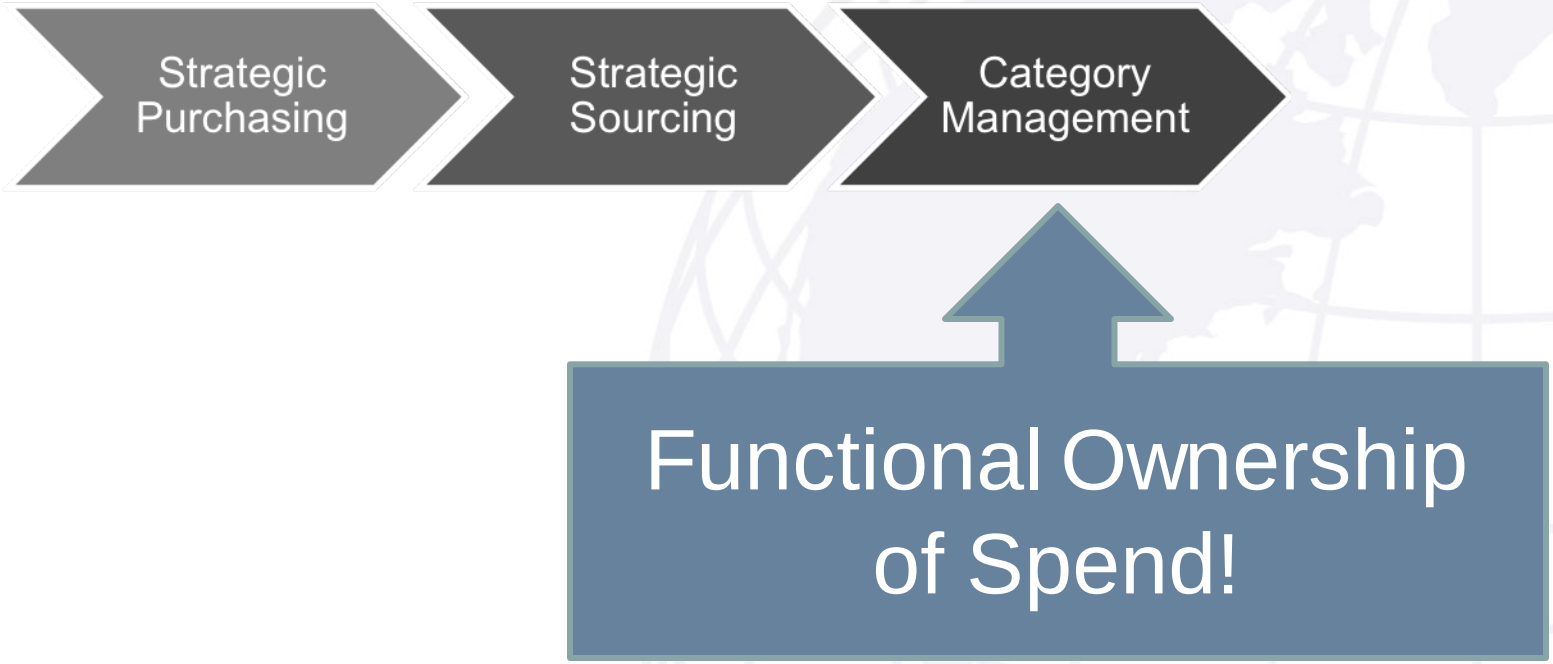
Source: OUSD AT&L (2017)

Research Objective

Optimally cluster DoD installations based on known cost-drivers of common, enterprise-wide installation services.

Category Management

Latest evolution of strategic purchasing that attempts to control costs in order to achieve competitive advantages



Category Management

Government-Wide Category Organization

Common Government Spend Categorie

1. IT – $50.7B
- 1.1 IT Software
- 1.2 IT Hardware
- 1.3 IT Consulting
- 1.4 IT Security
- 1.5 IT Outsourcing
- 1.6 Telecommunications

2. Professional Services – $63.4B
- 2.1 Business Administration Services
- 2.2 Legal Services
- 2.3 Management Advisory Services (Excludes R&D 17.0)
- 2.4 Marketing and Distribution
- 2.5 Public Relations and Professional Communications Services
- 2.6 Real Estate Services
- 2.7 Trade Policy and Services
- 2.8 Technical and Engineering Services (non-IT) (Excludes 1.0)
- 2.9 Financial Services
- 2.10 Social Services

3. Security and Protection – $5.3
- 3.1 Security Animals & Related Services
- 3.2 Security Systems
- 3.3 Security Services

4. Facilities & Construction - $72.5B
- 4.1 Construction Related Materials
- 4.2 Construction Related Services
- 4.3 Facility Related Materials
- 4.4 Facility Related Services
- 4.5 Facilities Purchase & Lease

Industrial Products and Services - $11.0B
- Machinery & Components
- Fire/Rescue/Safety/Environmental Protection Equipment
- Hardware & Tools
- Test & Measurement Supplies
- Industrial Products Install/Maintenance/Repair /Rebuild
- Basic Materials
- Oils, Lubricants, and Waxes

6. Office Management - $1.7B
- 6.1 Office Management Products
- 6.2 Office Management Services
- 6.3 Furniture

7. Transportation and Logistics Services – $25.6B
- 7.1 Package Delivery & Packaging
- 7.2 Logistics Support Services
- 7.3 Logistics Civil Augmentation Program
- 7.4 Transportation of Things
- 7.5 Motor Vehicles (non-combat)
- 7.6 Transportation Equipment
- 7.7 Fuels

8. Travel and Lodging - $2.2B
- 8.1 Passenger Travel
- 8.2 Lodging Travel Agent & Misc. Services
- 8.3

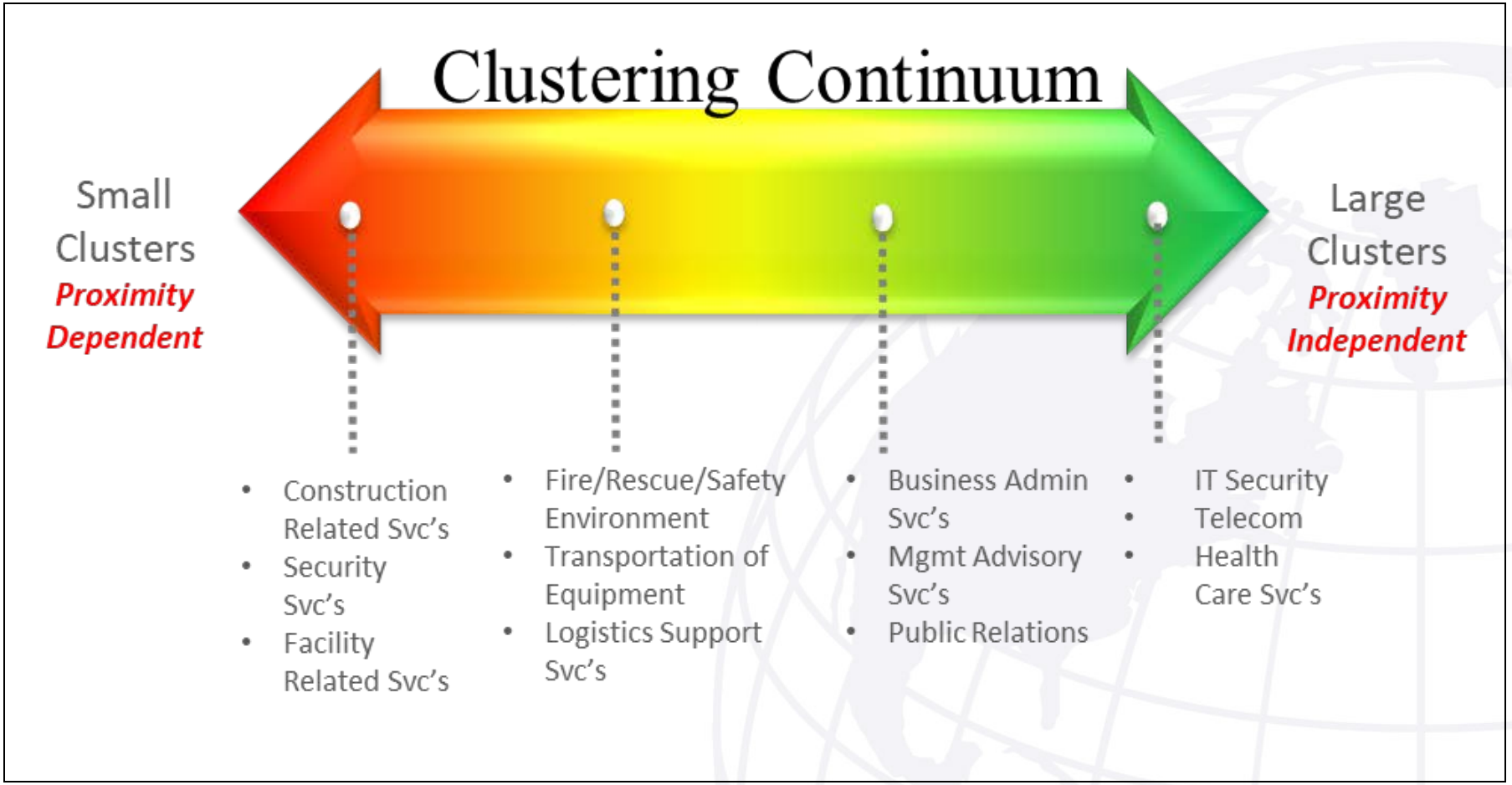
9. Human Capital - $4.7B
- 9.1 Alternative Educational Systems
- 9.2 Educational Facilities
- 9.3 Educational Institutions
- 9.4 Specialized Educational Services
- 9.5 Vocational Training
- 9.6 Human Resources Services

10. Medical - $35.2B
- 10.1 Drugs and Pharmaceutical Products
- 10.2 Medical Equipment & Accessories & Supplies
- 10.3 Healthcare Services

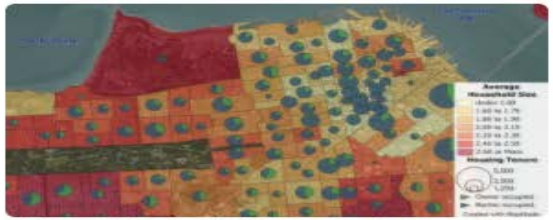
Note: Spend figures are based on FY15 FPDS data

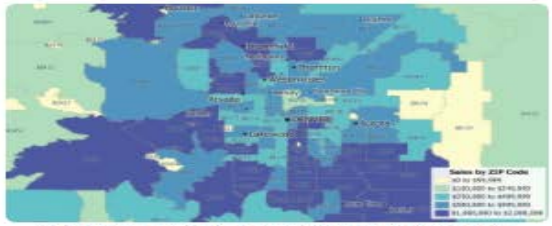
Source: Defense Procurement and Acquisition Policy (n.d.).

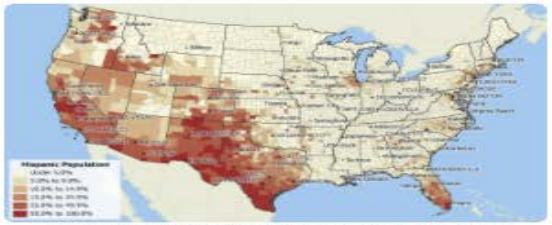
Method


Clustering Continuum
Small Clusters
Proximity Dependent
Large Clusters
Proximity Independent
• Construction Related Svc's
• Security Svc's
• Facility Related Svc's
• Fire/Rescue/Safety Environment
• Transportation of Equipment
• Logistics Support Svc's
• Business Admin Svc's
• Mgmt Advisory Svc's
• Public Relations
• IT Security
• Telecom
• Health Care Svc's

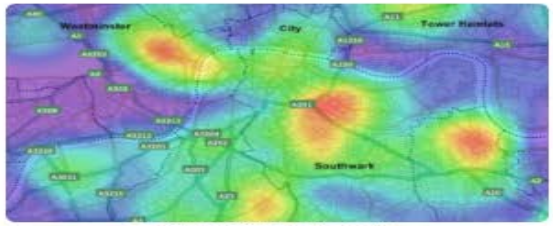
Method


Use aerial and satellite images for geographic editing and reference


Analyze sales and customer data by postal code or ZIP Code


Perform nationwide Census demographic analysis

Locate your customers and facilities


Find Crime hot spots

FInd shortest paths and routes

Determine market potential and target growth opportunities

Create territories based on drive time or distance

Use geographic data from other GIS and CAD Sources

Analyze real estate trends

Find locations anywhere in the world

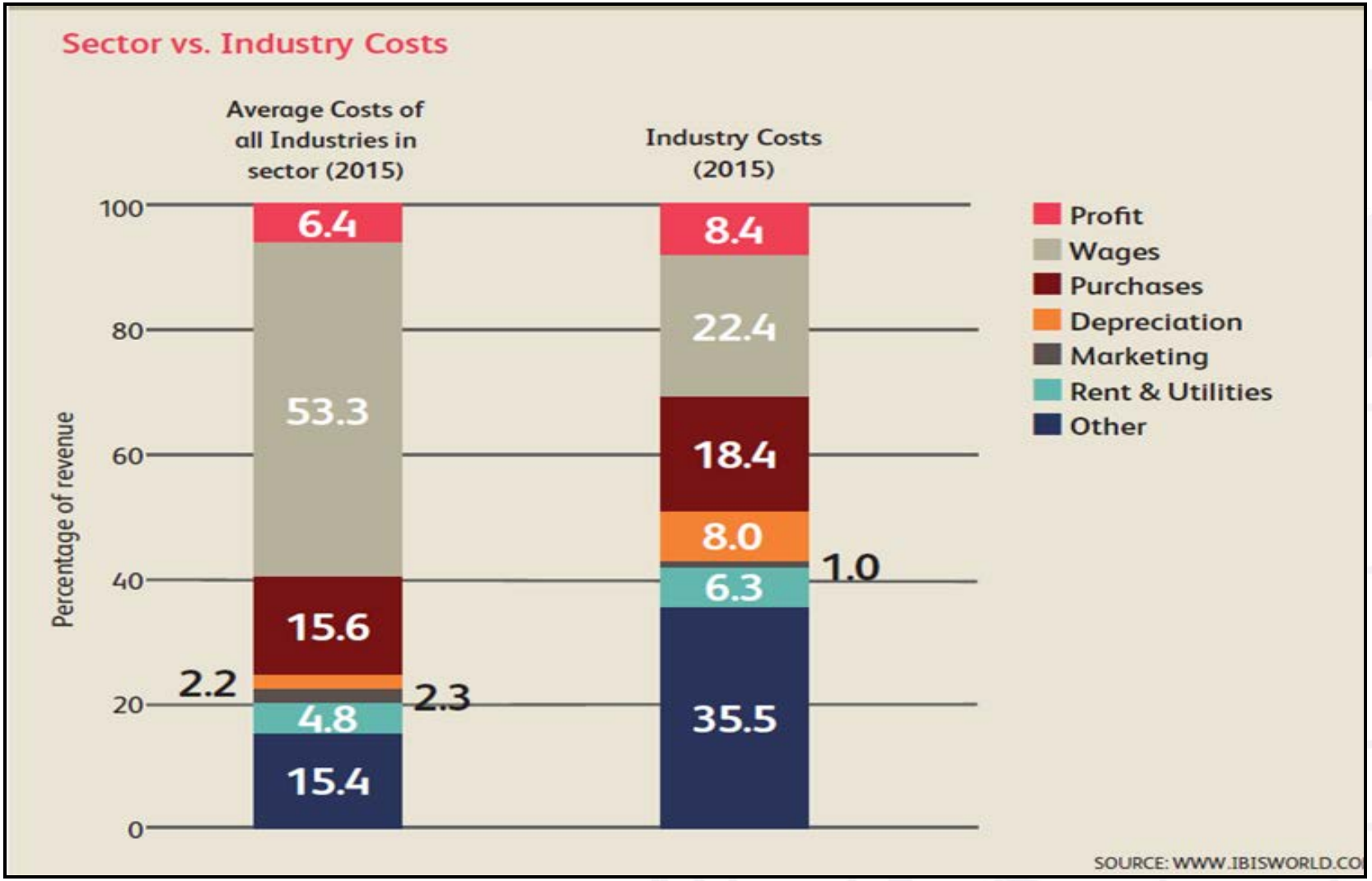
Visualized flows of goods or people

Source: MPCluster (n.d.)

Method

- Identify DOD requiring activities for a given service
- Identify cost-driver market intelligence relevant to developing clusters
- Integrate cost-driver market intelligence into commercial mapping software
- Use cost-driver market intelligence to determine optimal cluster size

ISWM Cost Drivers



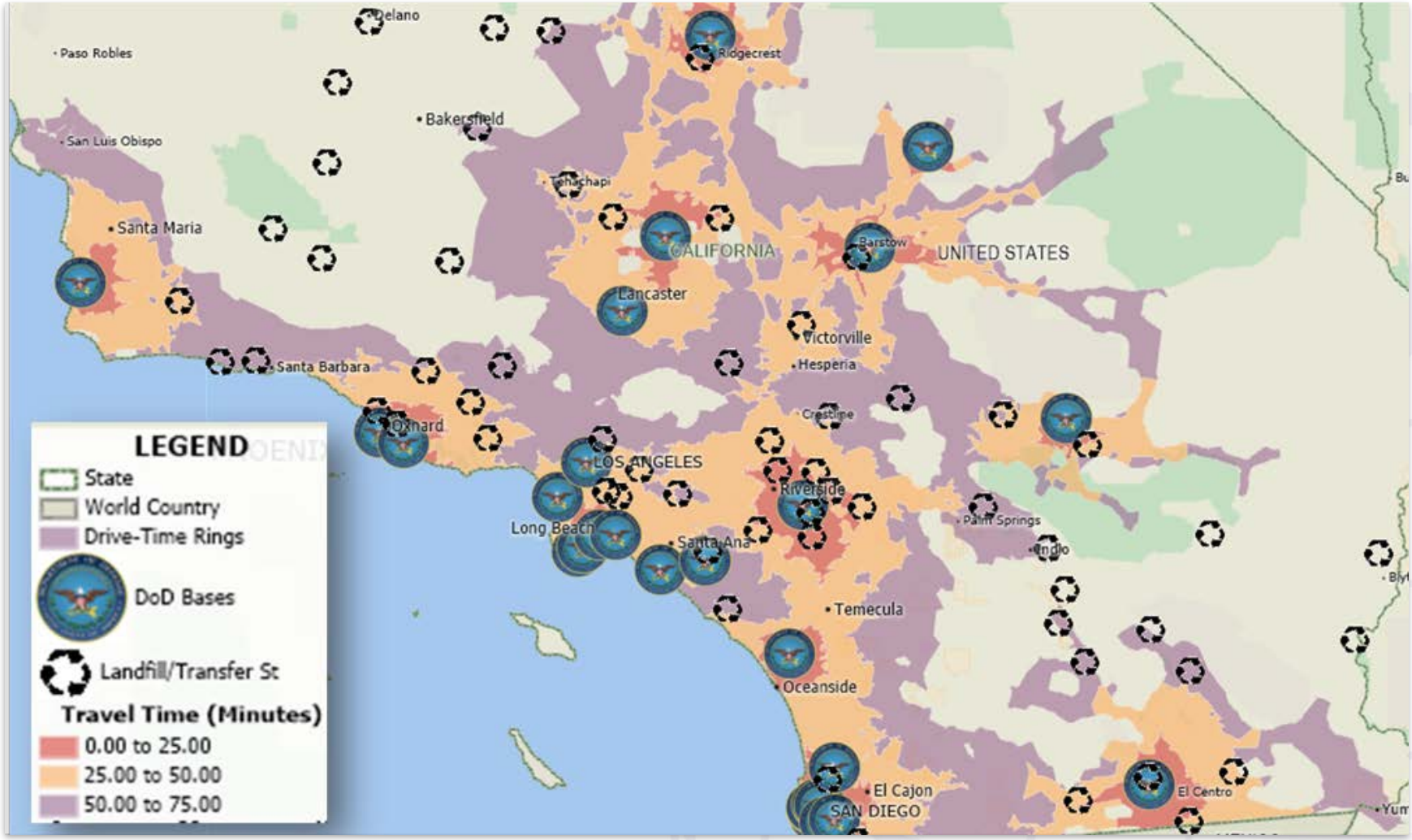
Data

- FY15 DoD Base Structure Report
  - Building ft^2
  - Owned acreage
  - # Personnel assigned
- 2016 ISWM Category Intelligence Report
- CE Sub-Activity Management Plan Data
- FPDS-NG Contract Data (15 DoD installations within 100 mile radius of El Segundo)
- Landfills & transfer stations (27 within 100 mile radius of El Segundo)

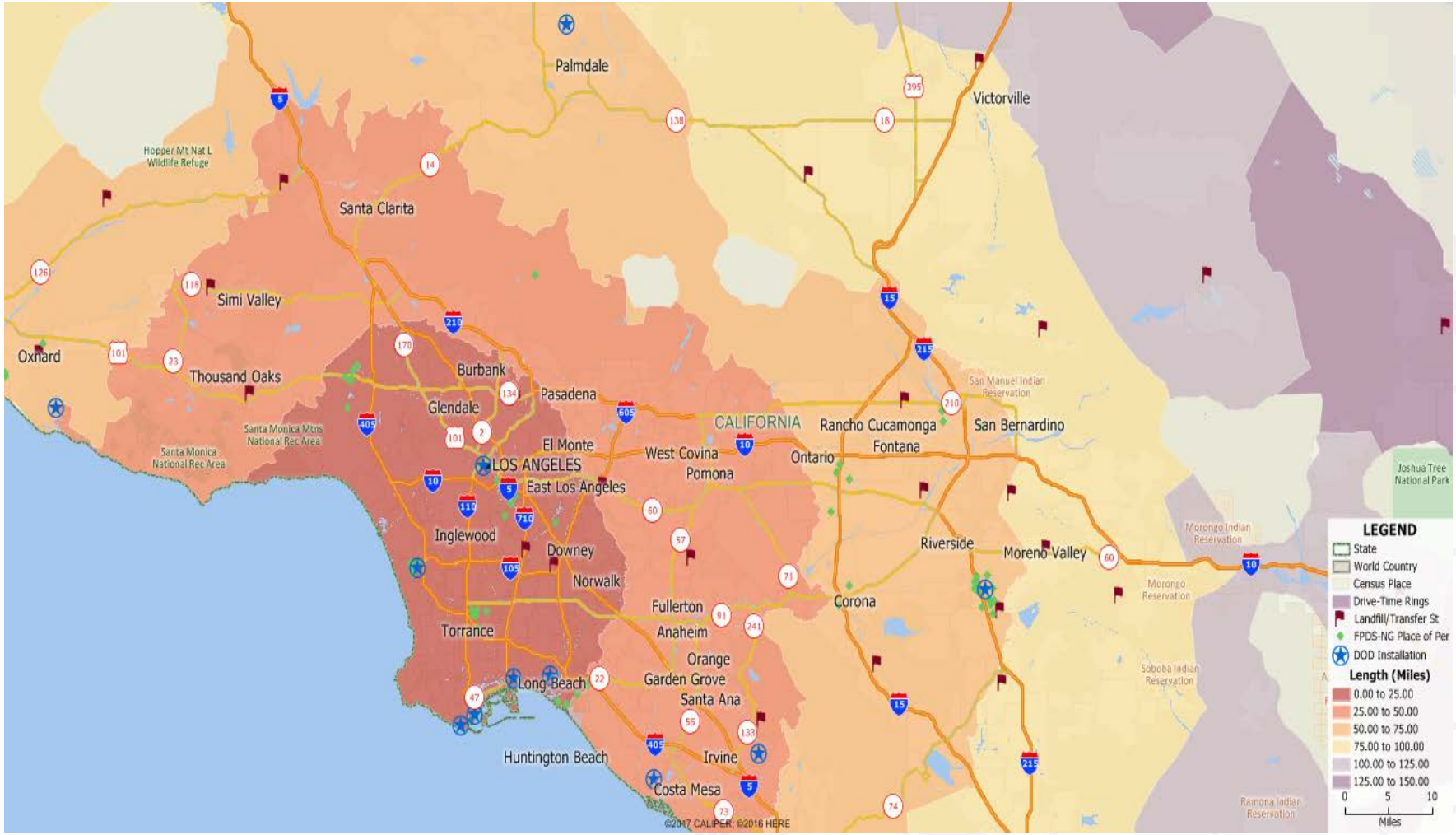
Findings

- ISWM is less wage-driven than the overall services sector
- Fixed assets are expensive (trucks, equipment, dumpsters)
- Variable costs can be high (fuel, landfill fees)
- Trucks get 2-3 mpg x ~100 gallon tanks = ~200 miles round trip

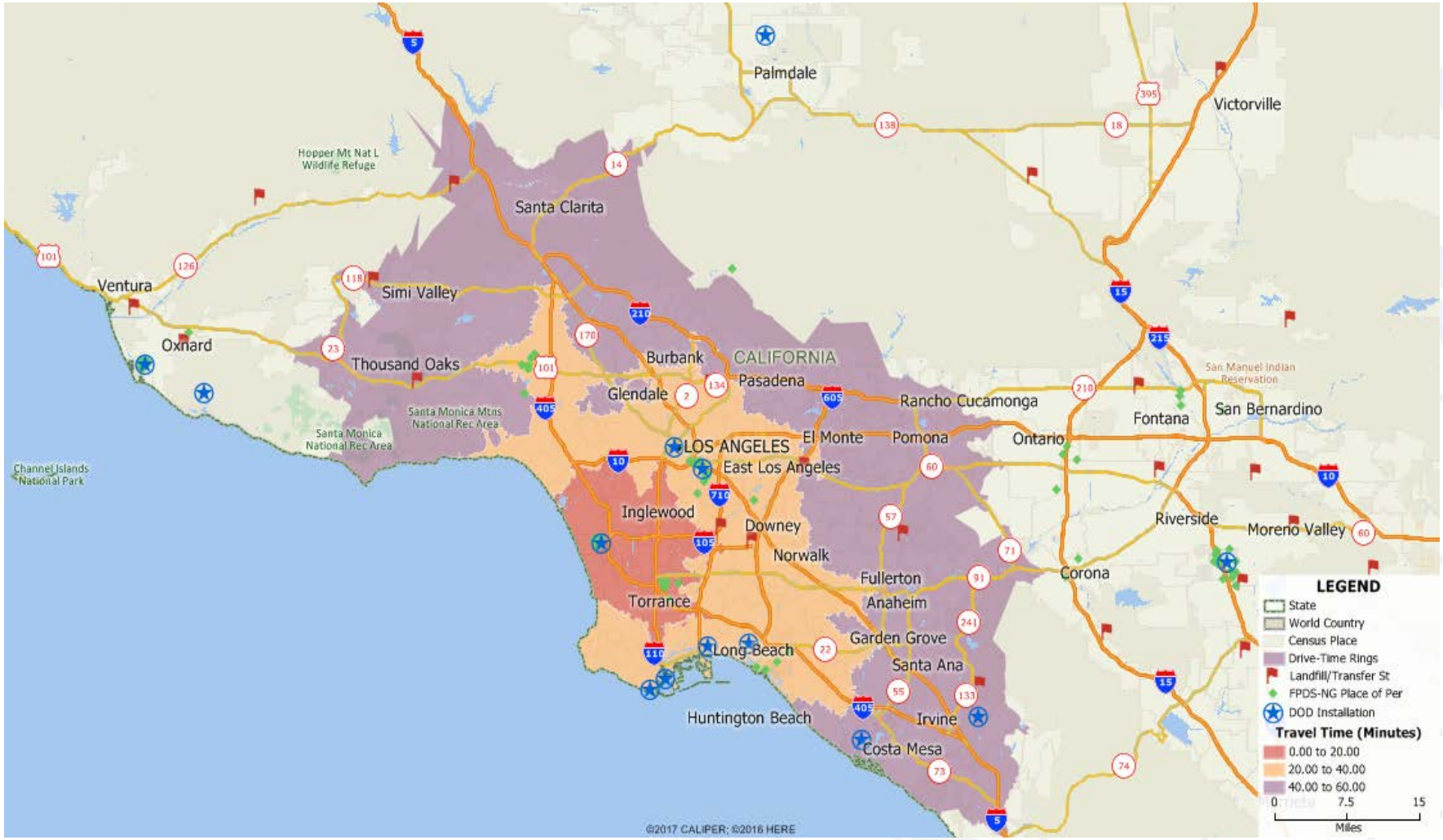
Findings


Delano
Paso Robles
Ridgecrest
Bakersfield
San Luis Obispo
Tehachapi
Santa Maria
CALIFORNIA
Barstow
UNITED STATES
Lancaster
Victorville
Hesperia
Santa Barbara
Oxnard
Crestline
LOS ANGELES
Riverside
Long Beach
Santa Ana
Palm Springs
Indio
Temecula
Oceanside
El Cajon
SAN DIEGO
El Centro
LEGEND
State
World Country
Drive-Time Rings
DoD Bases
Landfill/Transfer St
Travel Time (Minutes)
0.00 to 25.00
25.00 to 50.00
50.00 to 75.00

Findings


Palmdale
Victorville
Hopper Mt Nat L Wildlife Refuge
Santa Clarita
Simi Valley
Oxnard
Thousand Oaks
Burbank
Pasadena
Glendale
Santa Monica Mtns National Rec Area
Santa Monica National Rec Area
El Monte
LOS ANGELES
East Los Angeles
West Covina
Pomona
CALIFORNIA
Rancho Cucamonga
Fontana
Ontario
San Bernardino
San Manuel Indian Reservation
Joshua Tree National Park
Inglewood
Downey
Norwalk
Torrance
Fullerton
Anaheim
Orange
Garden Grove
Santa Ana
Long Beach
Huntington Beach
Irvine
Costa Mesa
Riverside
Moreno Valley
Corona
Morongo Indian Reservation
Morongo Reservation
Soboba Indian Reservation
Rampna Indian Reservation
©2017 CALIPER; ©2016 HERE
LEGEND
State
World Country
Census Place
Drive-Time Rings
Landfill/Transfer St
FPDS-NG Place of Per
DOD Installation
Length (Miles)
0.00 to 25.00
25.00 to 50.00
50.00 to 75.00
75.00 to 100.00
100.00 to 125.00
125.00 to 150.00
0 5 10
Miles

Findings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Fontana
San Bernardino
San Manuel Indian Reservation
Santa Monica Mtns National Rec Area
Santa Monica National Rec Area
LOS ANGELES
El Monte
Pomona
Ontario
East Los Angeles
Channel Islands National Park
Inglewood
Downey
Riverside
Moreno Valley
Norwalk
Corona
Fullerton
Torrance
Anaheim
Garden Grove
Long Beach
Santa Ana
Huntington Beach
Irvine
Costa Mesa
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LEGEND
State
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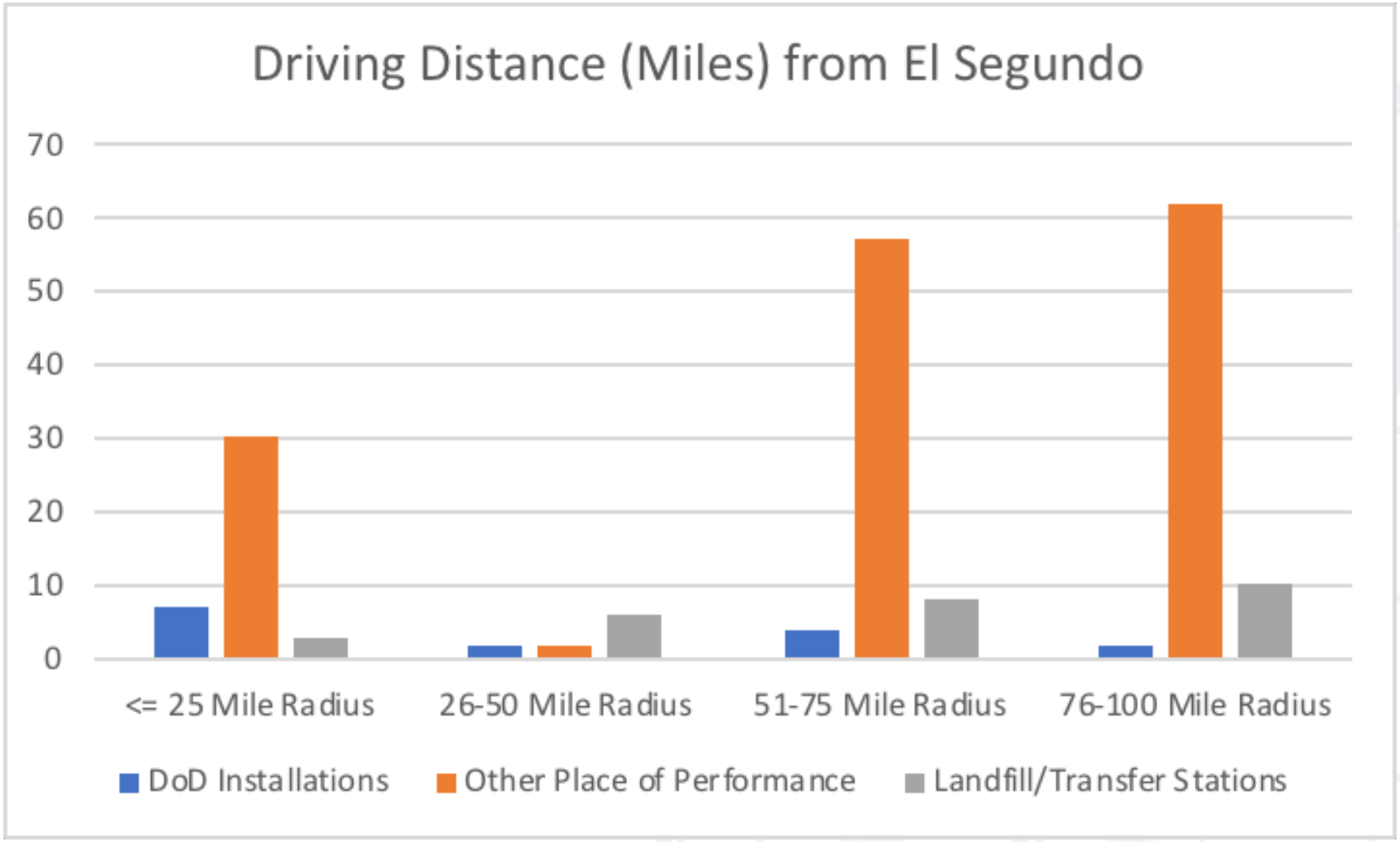
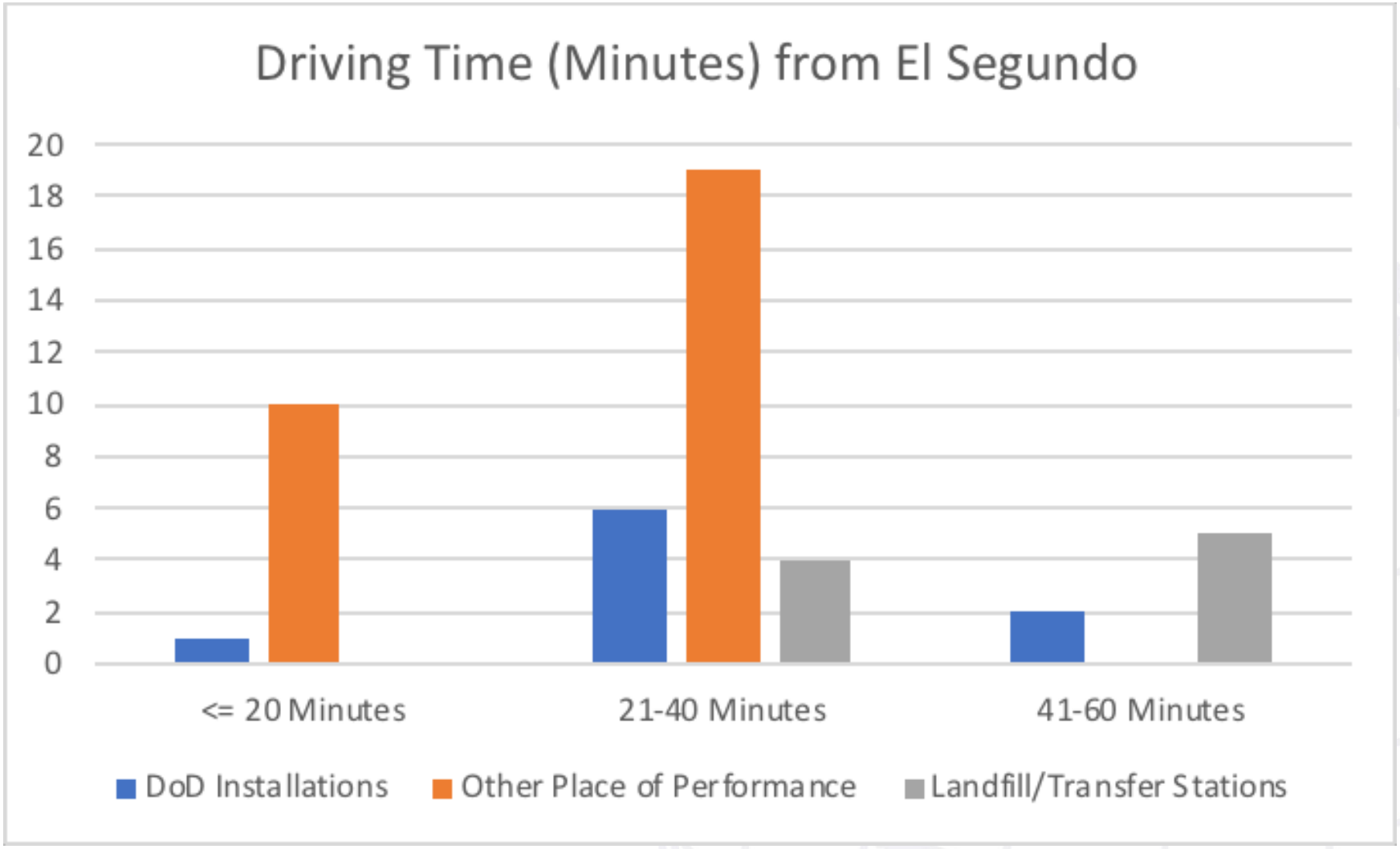
Drive-Time Rings
Landfill/Transfer St
FPDS-NG Place of Per
DOD Installation
Travel Time (Minutes)
0.00 to 20.00
20.00 to 40.00
40.00 to 60.00
0
7.5
15
Miles

Findings


Driving Distance (Miles) from El Segundo
70
60
50
40
30
20
10
0
<= 25 Mile Radius
26-50 Mile Radius
51-75 Mile Radius
76-100 Mile Radius
DoD Installations
Other Place of Performance
Landfill/Transfer Stations

Findings


Driving Time (Minutes) from El Segundo
20
18
16
14
12
10
8
6
4
2
0
<= 20 Minutes
21-40 Minutes
41-60 Minutes
DoD Installations
Other Place of Performance
Landfill/Transfer Stations

Findings

- Rate Savings – Inconclusive
- Process Savings*
  - 395.42 man-hours per 5 year contract
  - 14 Installations = 5,535.88 man-hours
- Demand Savings – Inconclusive

*Based on the 2014 Operational Contracting Air Force Manpower Standard

Concluding Thoughts

- Potential for large cost savings by clustering common installation-level services
- Commercial software can help create clusters
  - Which suppliers service a particular area
  - Which contracting offices could serve as hubs
- Category Management ”cost ownership” structure is necessary to push implementation

Questions?

References

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