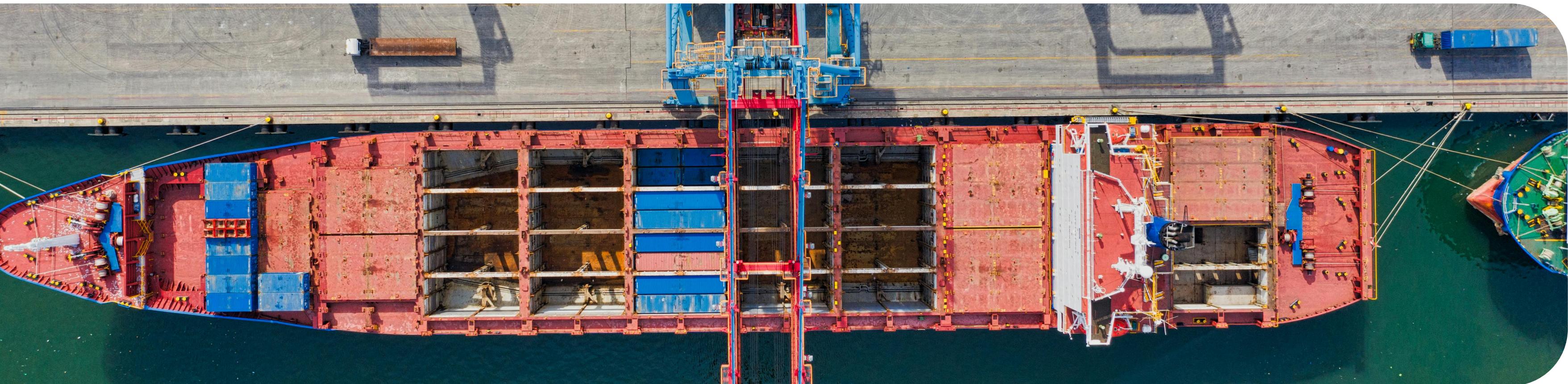


# Analyzing OTS, Capacity, and VCPU for Network Expansion Decisions

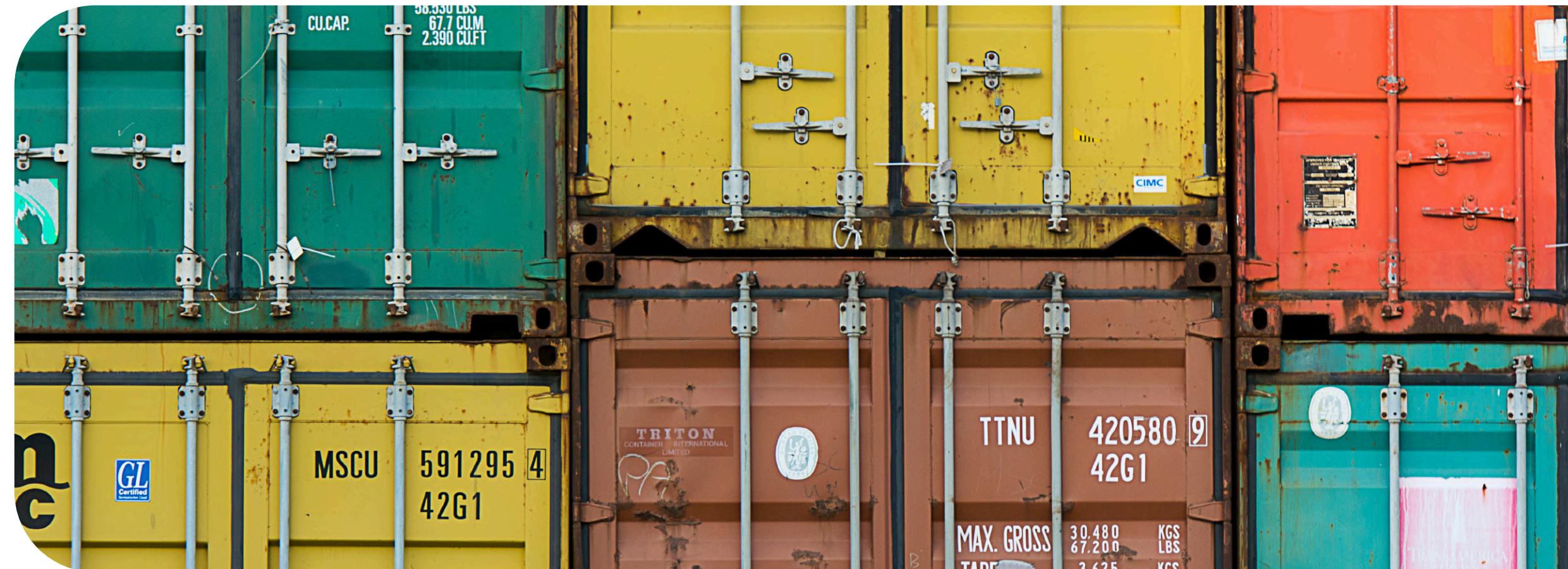
Mayur Panchal



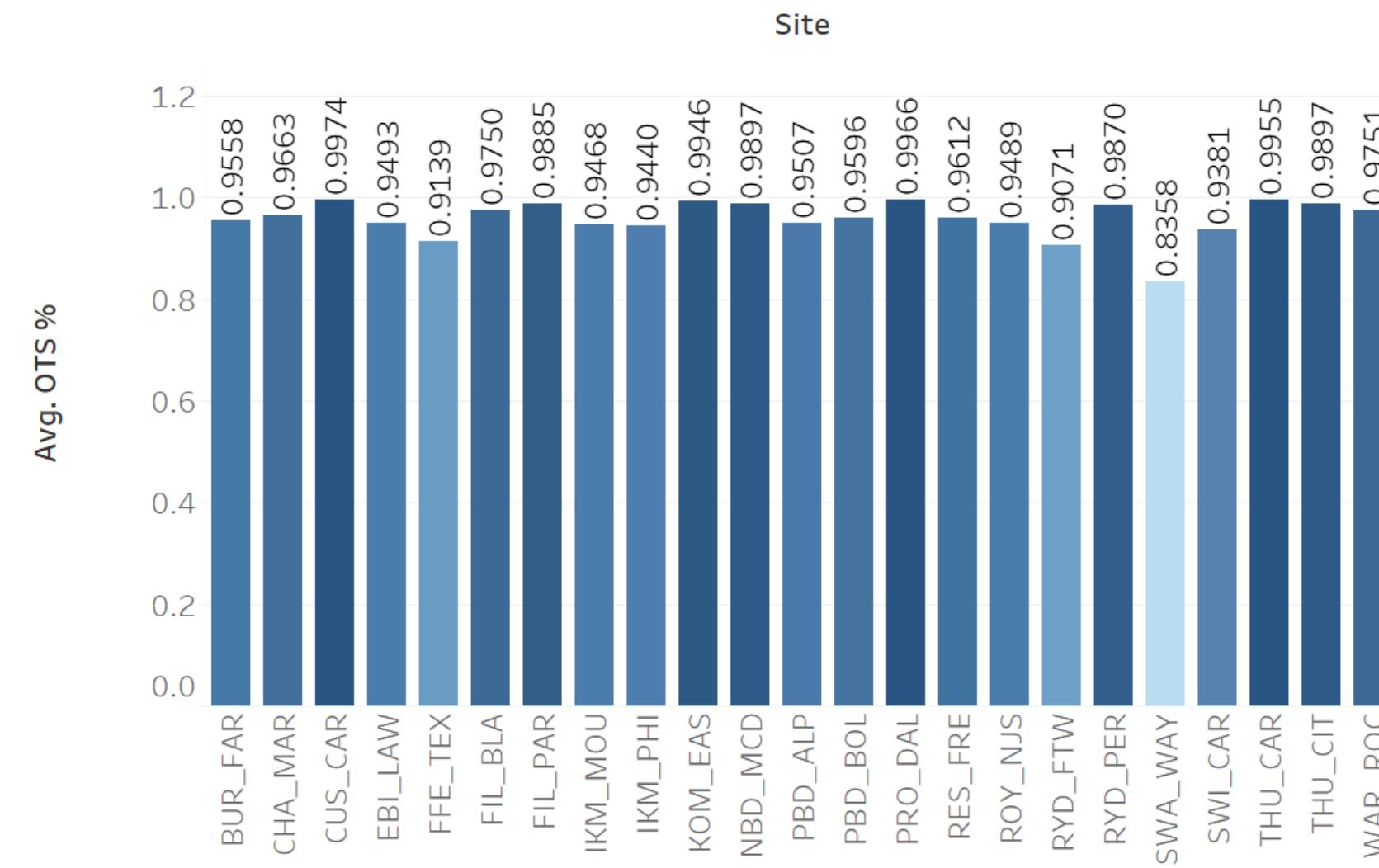
# Data Overview

Key variables:

- OTS (On-Time Shipping) – reliability of each site & region
- Capacity (Inbound & Outbound) – throughput potential
- VCPU (Variable Cost Per Unit) – efficiency/cost to process shipments



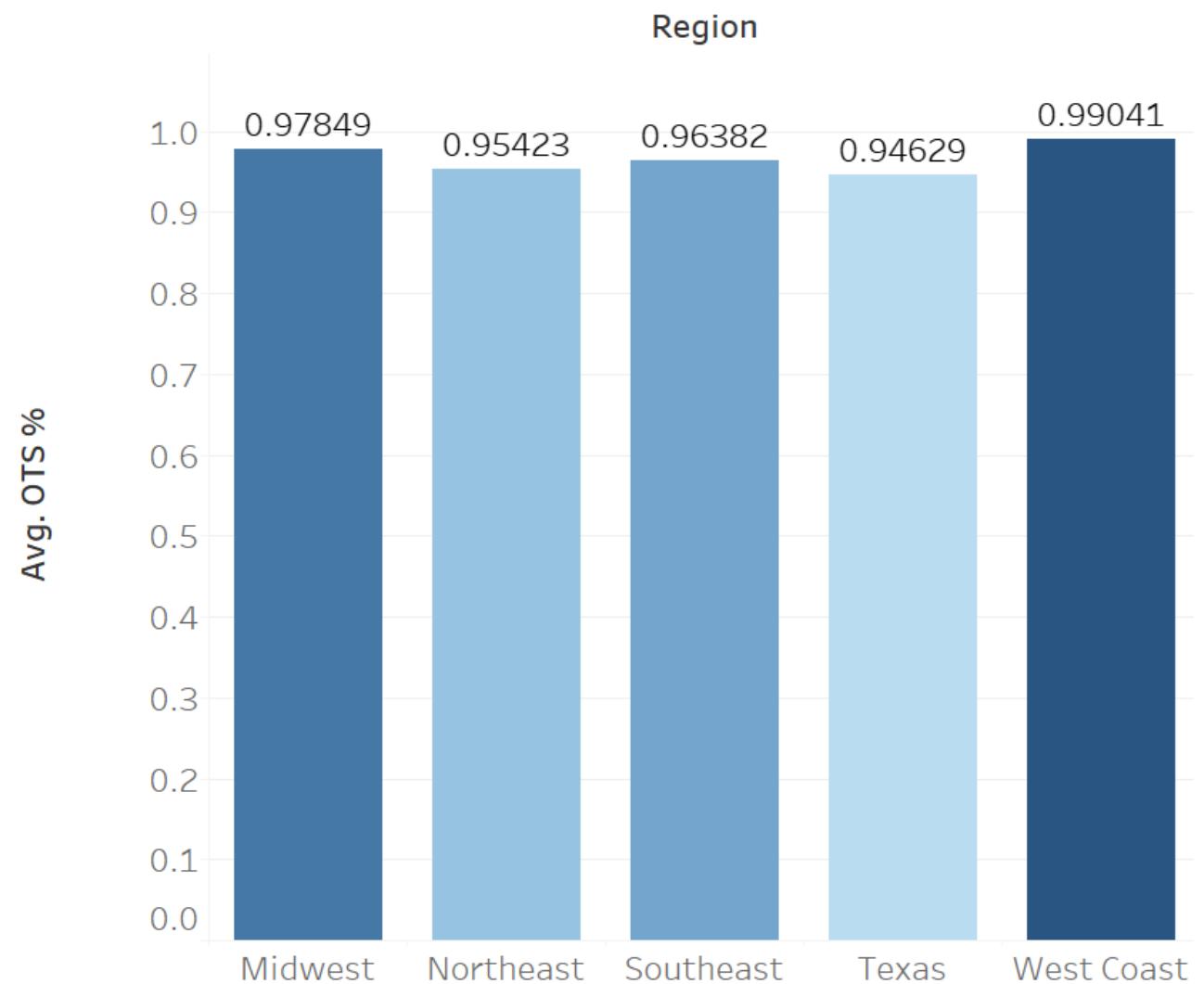
# OTS Performance By Site



## Site Highlights:

- Best: CUS\_CAR (99.74%), PRO\_DAL (99.66%), THU\_CAR (99.55%)
- Needs improvement: SWA\_WAY (83.58%), RYD\_FTW (90.71%), FFE\_TEX (91.39%)

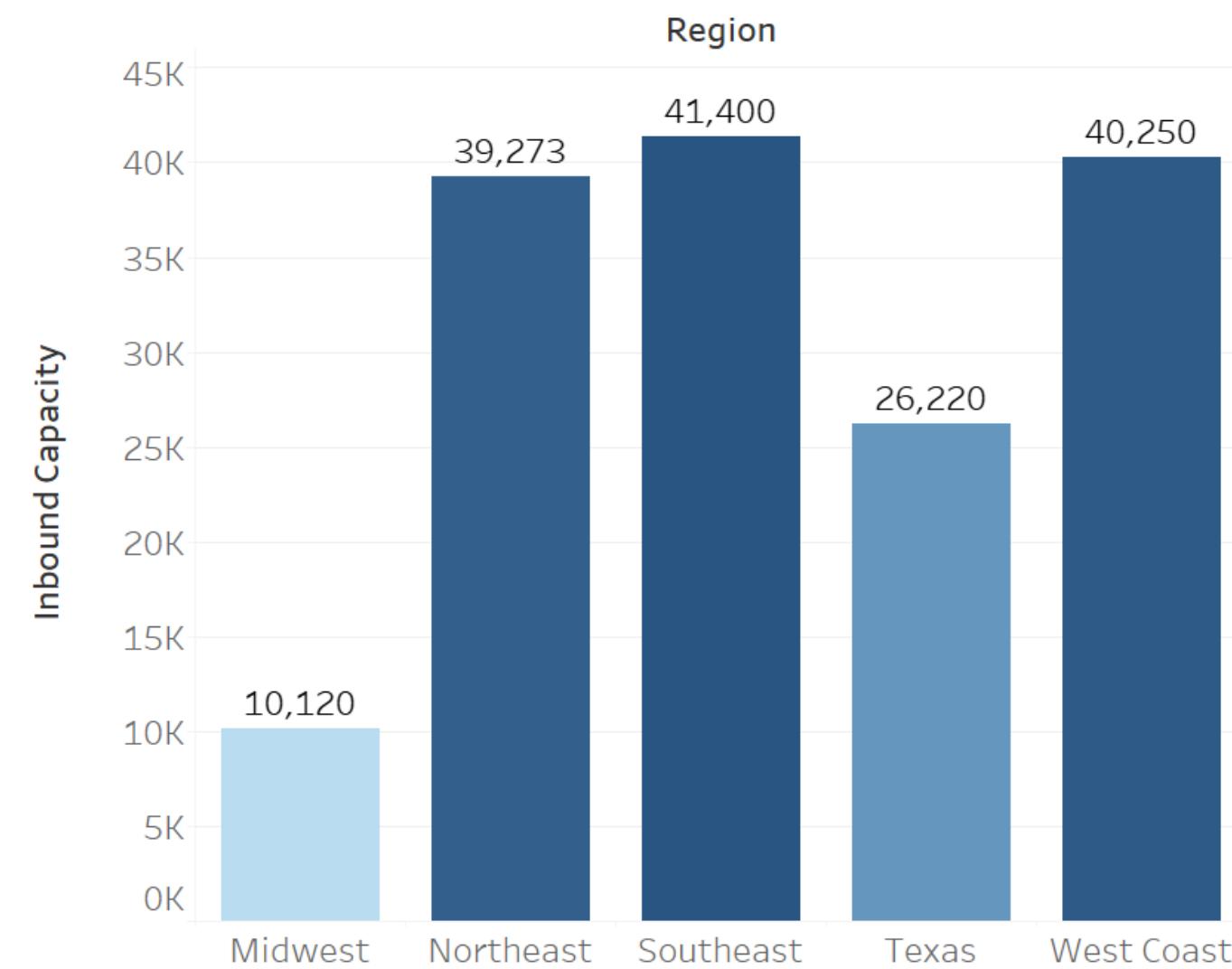
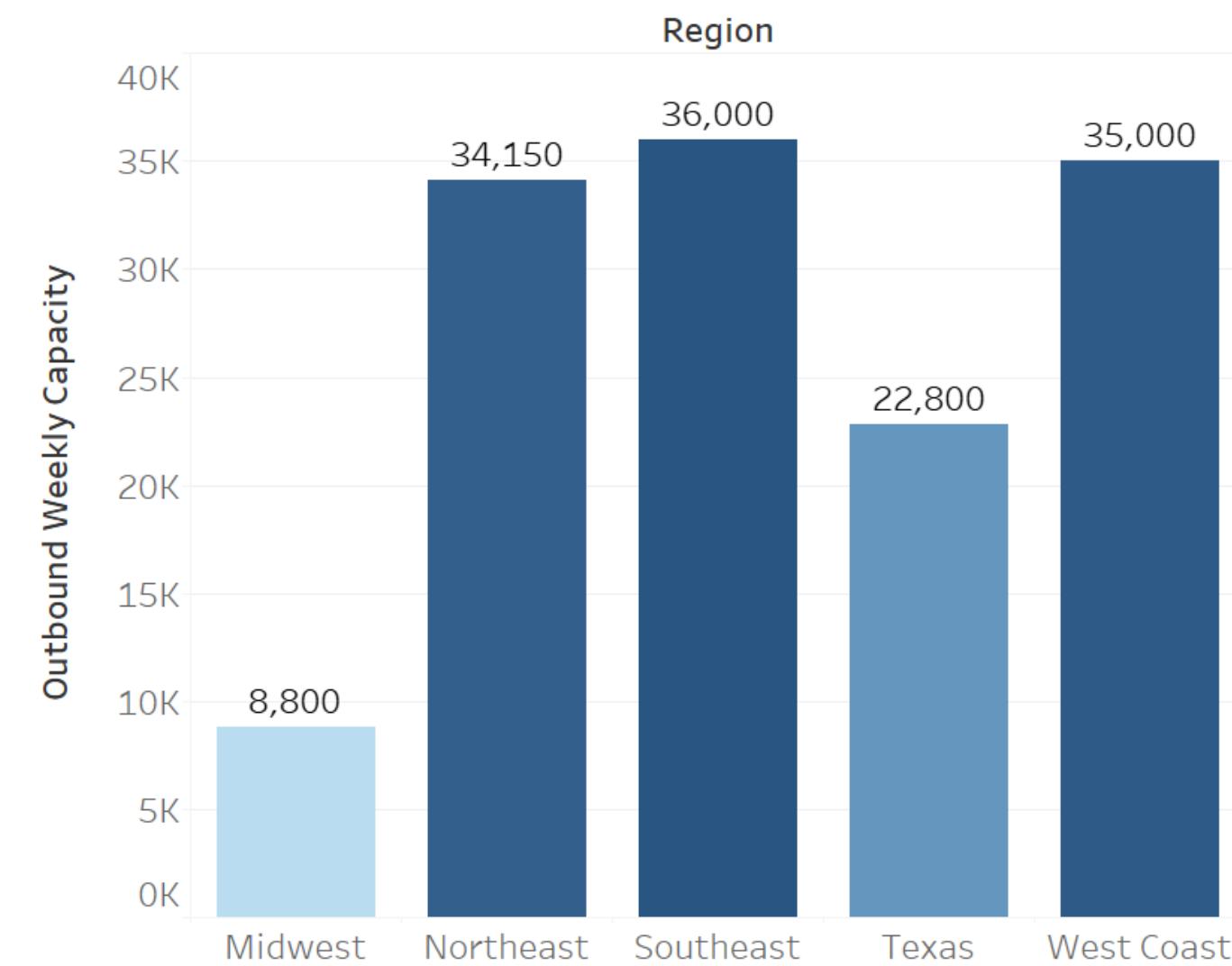
# OTS Performance By Region



Regional:

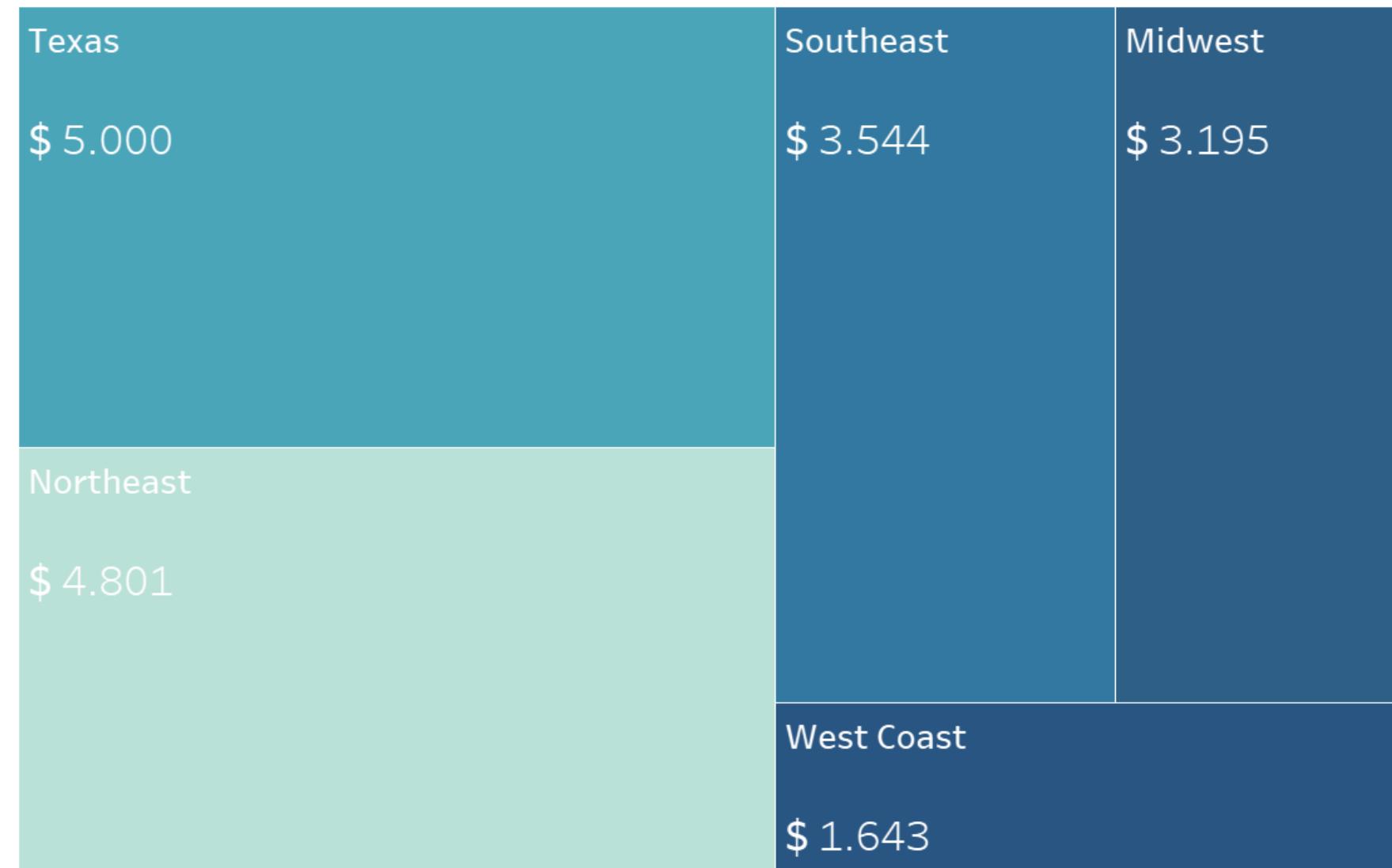
- The West Coast (99.04%) stands out as the most reliable, while Texas (94.62%) requires attention.
- Other regions perform consistently in the 95–97% range but are less exceptional.

# Capacity Insights



- Largest capacity regions: West Coast & Southeast
- Lowest capacity region: Midwest

# Average VCPU By Region



- Lowest cost: West Coast (\$1.64)
- Highest cost: Texas (\$5.00), Northeast (\$4.80)
- Southeast (\$3.54) and Midwest (\$3.20) sit in the middle

# Correlations & Insights

- West Coast = Low VCPU+ High OTS + High capacity → Ideal expansion candidate
- Southeast = High capacity + Good OTS + Mid. VCPU→ Strong secondary hub
- Northeast = High capacity but expensive → Expand selectively
- Texas = High VPCU, mixed OTS → Fixing site-level inefficiencies before scaling
- Midwest = Low capacity, no cost advantage → Deprioritize expansion



# Using Insights For Future Decision-Making

- Expand in West Coast first → Best combination of cost efficiency, reliability, and capacity. It should be a core hub for scaling.
- Develop Southeast as a secondary hub → Large capacity, stable performance, and reasonable costs make it a strong choice.
- Selective investment in Northeast → Strong demand capacity but high costs; expansion should be customer-demand driven.
- Improve Texas before scaling → Address site-level issues (FFE\_TEX, RYD\_FTW) before considering expansion, given high costs.
- Limit Midwest expansion → Low capacity and no major cost advantage; keep it as a supporting region rather than a growth hub.
- Operational focus → Lift up the underperforming sites (SWA\_WAY, RYD\_FTW, FFE\_TEX) by applying best practices from high-OTS sites (CUS\_CAR, PRO\_DAL, THU\_CAR).

# Thank You!

