



Short Sea Logistics

M-10 Marine Highway



Dal-Tile Introduction



- **Subsidiary of Mohawk Industries**

- World's Largest Flooring Manufacturer, HQ in Calhoun, GA
- Dal-Tile Division HQ in Dallas, TX



- **Dal-Tile Division Has Nine NA Manufacturing Locations**

- Olean, NY
- Gettysburg, PA
- Lewisport, KY
- Muskogee, OK
- Fayette, AL
- El Paso, TX
- Chihuahua, CI
- Monterrey, NL
- Salamanca, GJ



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Product Transit Monterrey - OTR



65-75#/cuft

< 30% Cube
Utilization

53' VAN, 57k#, 26 MT



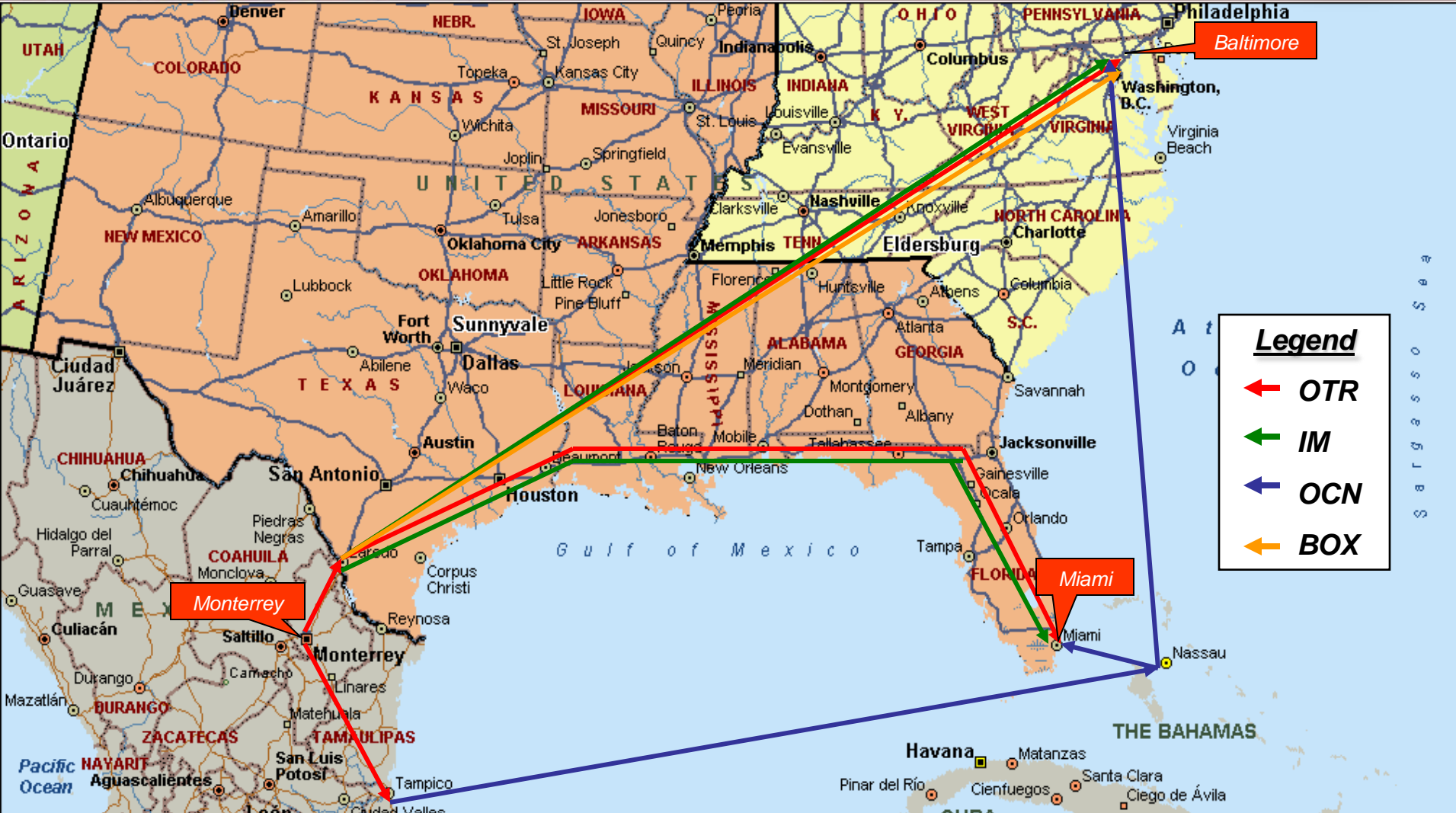
Product Transit Monterrey - Boxcar



60' STD CF BOXCAR, 200k#, 90 MT



Pre Trans-Gulf Freight Lanes



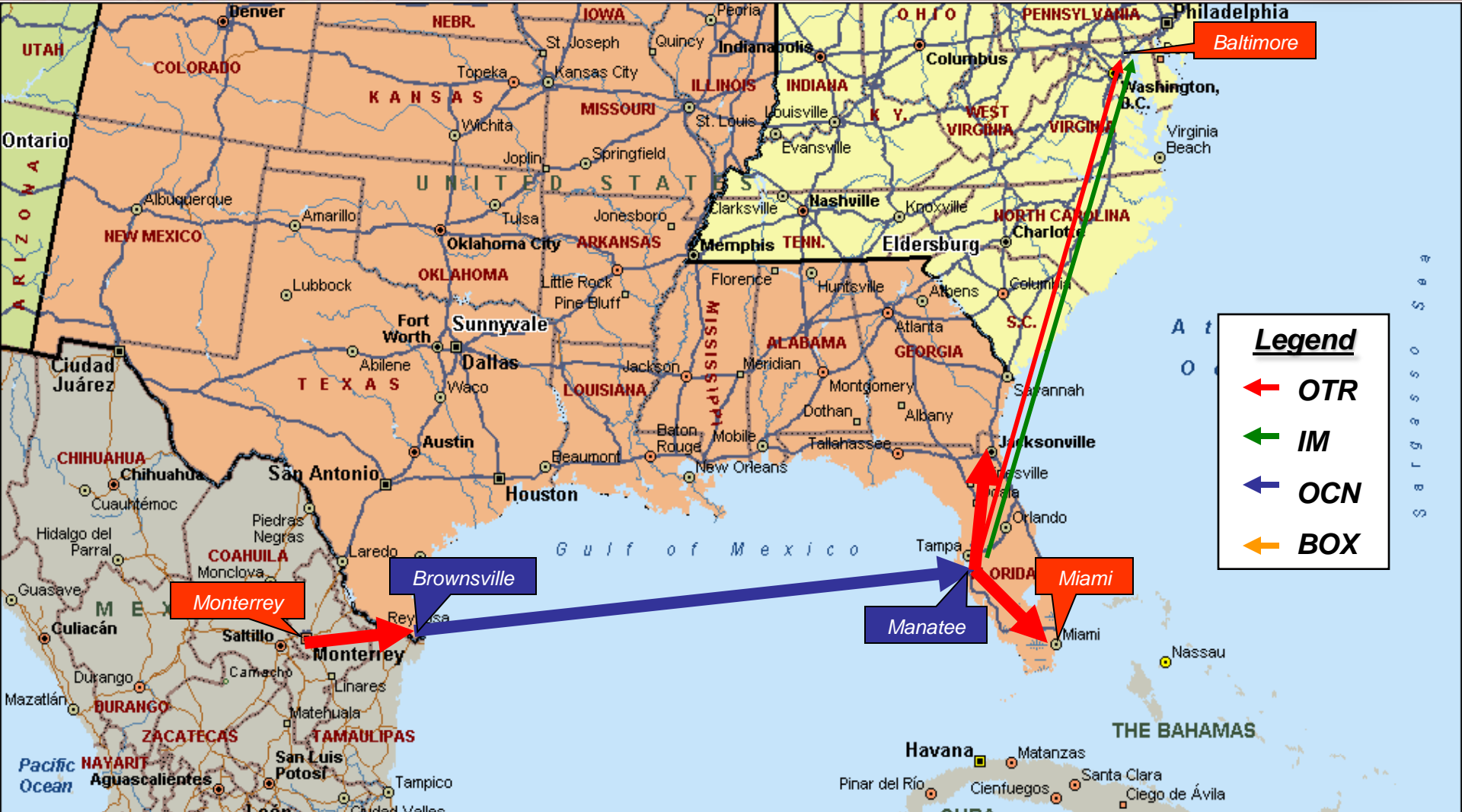


Pre -TransGulf (2008) Inventory Deployment

- ***Monterrey – Florida (28 day deployment)***
 - Ocean(20') (68%) - 35 days
 - Truck (21%) - 10 days
 - Intermodal (11%) - 20 days
- ***Monterrey – Baltimore (27 day deployment)***
 - Boxcar (40%) - 27 days
 - Intermodal (37%) - 17 days
 - Ocean(20') (19%) - 50 days
 - Truck (4%) - 10 days
- ***All Modes Cross/Clear Customs at Laredo, TX***



Post Trans-Gulf Freight Lanes





Post -TransGulf (2009-10) Inventory Deployment

- **Monterrey – Florida (Reduction of 13 days)**
 - Truck (30%) - 10 days
 - Truck-Barge-Truck (70%) - 17 days
- **Monterrey – Baltimore (Reduction of 9 days)**
 - Truck (25%) - 10 days
 - Intermodal (20%) - 17 days
 - Truck-Barge-IM/Truck (55%) - 22 days
- **Trans-Gulf Loads Cross at Brownsville, TX**

Operational Benefits

- ***Heavyweight Ground Transportation – Mexico***
- ***Avoidance of Tolls - Mexico***
- ***Heavyweight Crossings – Customs Brokerage***
- ***Heavyweight Ocean Service***
- ***Heavyweight Ground Transportation - Florida***
- ***Reduced Inventory Deployment Cycle Time & Variability***





Operational Challenges

- ***M-10 - a “Link” in the Supply Chain***
 - *As a Shipper, Use Depended on Internal Agility*
 - *Required Integration with other Modes/Services*
- ***Shippers Who are “ Leveraged” w/TMS can Adapt Easily to Multi-Leg Movements***
- ***Service Providers May Need Inland Partners***
 - *3PL/IMC*
 - *Regional OTR Carriers*
 - *Goal - Seamless Integration*
 - *Remove Complications*
 - *Create Broader Appeal to the Logistics Community*



Service Integration



Can we maintain a trouble free operation?



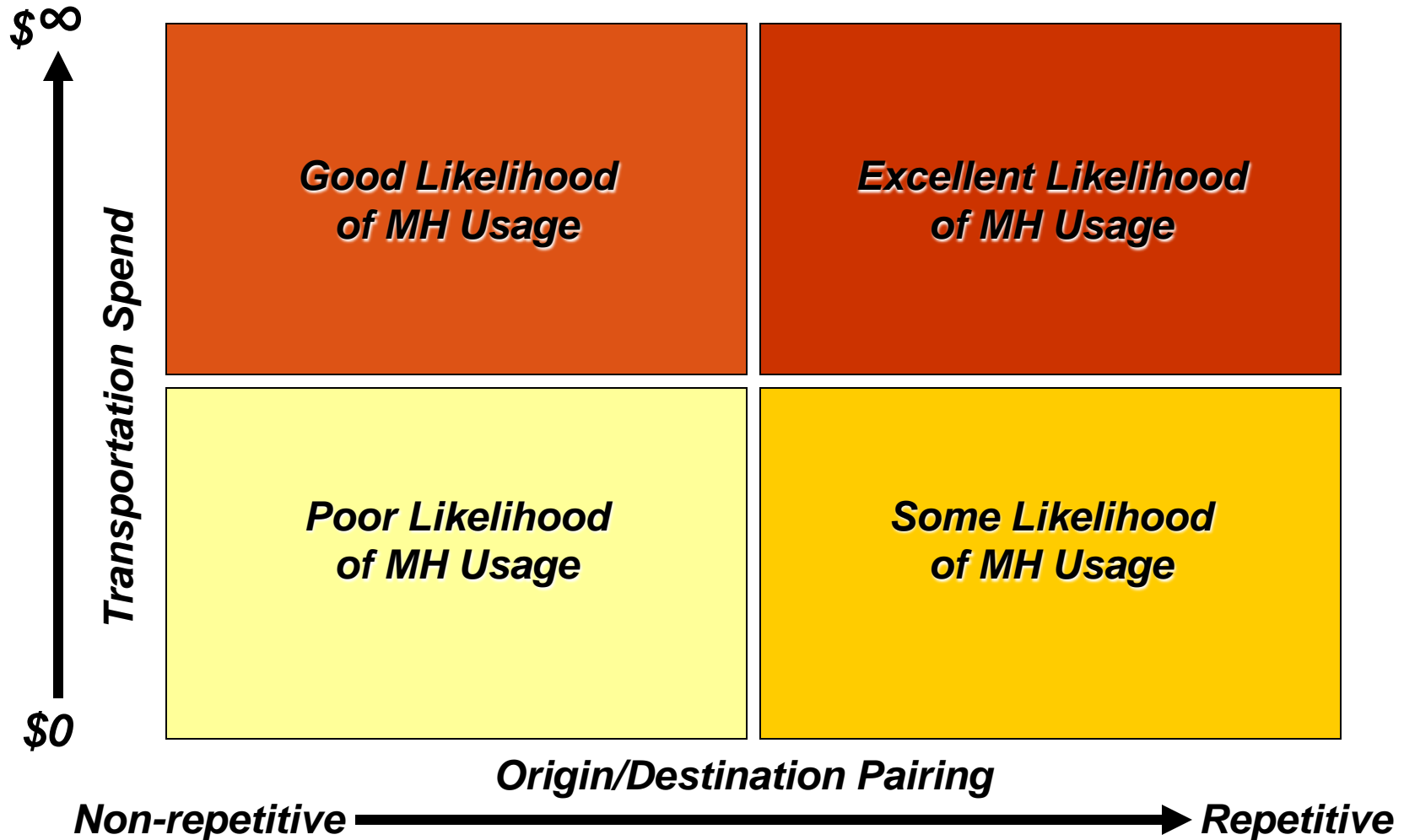


Qualifying the Marine Highway Opportunity

- ***What Drives the Decision Maker to Engage?***
 - Service?
 - Transit time
 - Equipment availability
 - Landed Cost?
 - Environmental/Social Factors?
 - Simplicity/Complexity?
- ***Value ----- Blend of Several Factors, Weighted Differently by Each Decision Maker***



Marine Highway “Appeal” Matrix





Facility Considerations

- **Port Security Requirements**
 - *TWIC requirement – not much impact on local operators*
 - *Linehaul operators aren't as likely to have TWIC*
 - *Need to think thru internal port logistics*
 - *Secured & unsecured trailer/container storage*
- **Container Operations – New or Additional Biz?**
- **Crossdock Activity – Need Dock Doors**
- **Facility Gate Operation Should be Studied**
 - *Can current gate operation support increased activity?*
 - *Delays impact carrier availability & viability of supply chain solution*



The Capacity “Shortfall”



- ***Logistics Community Recognizes the Issues***
 - *Capacity and Driver Availability Plague the OTR Industry*
 - *Aging workforce*
 - *Lack of industry appeal to the “new” workforce*
 - *Regulatory Issues*
 - *CSA 2010*
 - *Hours of Service*
 - *Impact of Fuel Cost*
 - *Infrastructure Wear & Tear, Congestion*
- Time is Right for this Multi-Modal Option-----***



Improving the Incentive

- ***General Understanding of the Importance of “Efficient” Non-OTR Transportation Options***
- ***US Lacks a “Systematic” Approach to IM/MM***
 - *80,000 lb GVW Doesn’t Sync Well w/IM/MM Service*
 - *“Neighbors” (CN & MX) offer higher weight limits*
 - *“Heavyweight Commercial Zones” at US/MEX POEs*
 - *Permitted Heavyweight “First & Last Mile” Legs*
 - *Creates “capacity” thru improved utilization of assets*
 - *Eliminates cost of “rehandling” & associated delays*
- ***Incentives Will Change Behavior***
 - *Integrates IM/MM Services*
 - *Social Benefits(fuel/carbon footprint, public sector impact)*



Furthering the Cause

- **Creating Broader Appeal**
 - *M-10 has Formidable Appeal to “HD/HW” Cargo*
 - *Heavyweight crossing implemented by POB*
 - *40/45’ containers favor weight, not cube*
 - *“Consolidation” of HD/LD Cargo Creates Opportunity*
 - *Low density cargo fills cubic capacity made available by HD cargo*
 - *Creates “incentive” for low density cargo*
 - *Secures volume for service operator*
 - *Have started several “shared capacity” lanes/operations*
 - *Demonstrates the effectiveness of collaboration*
 - *Believe shipper partners will follow us to M-10 when available*



Furthering the Cause



Tile Combined w/Appliances

Tile Only





Furthering the Cause



Tile Only

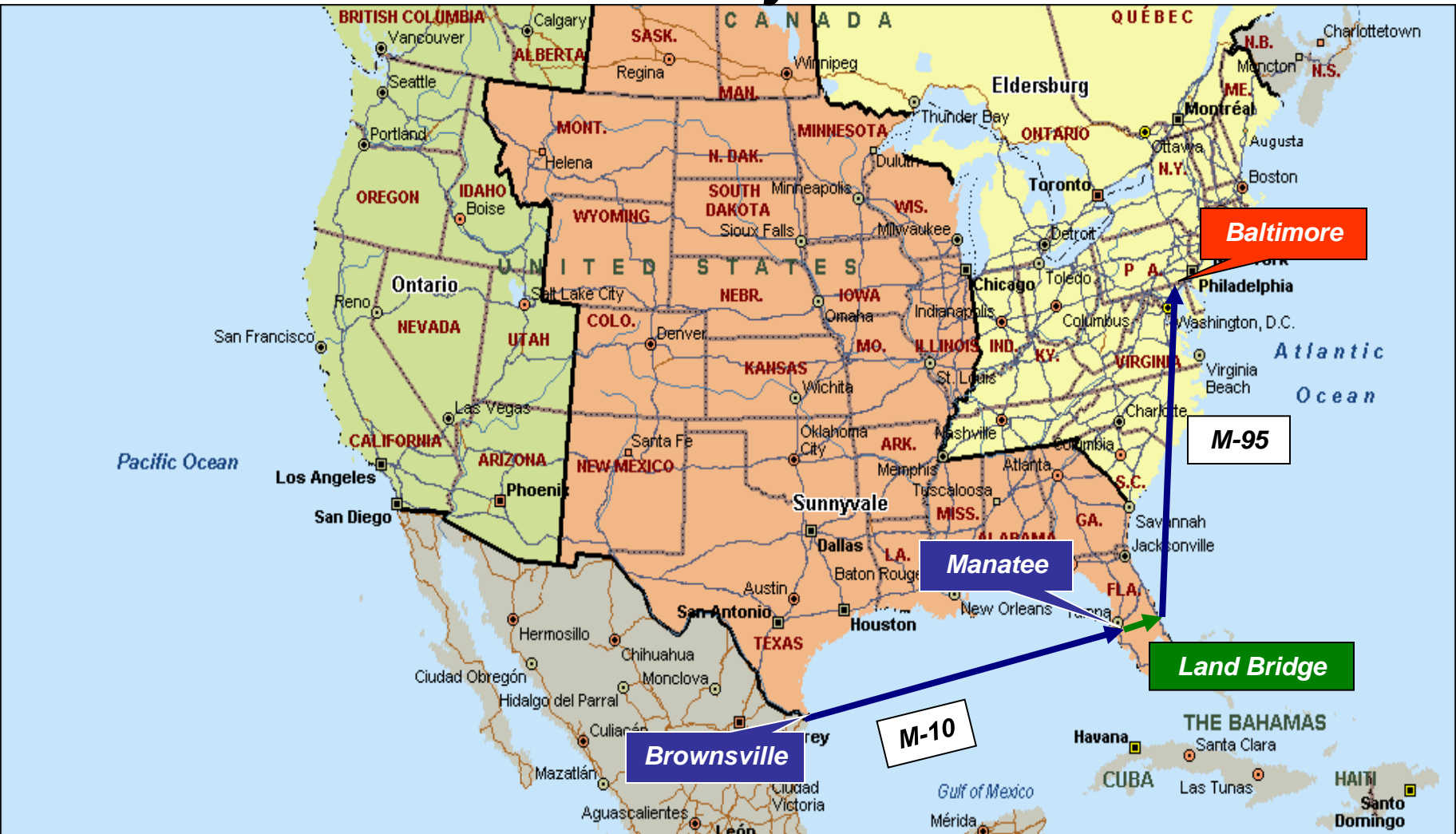
Tile Combined w/Ladders





Furthering the Cause

Connectivity of Services





Closing Comments

- ***Logistics is Dynamic by Nature***
 - *Capacity has Been Tight Since 2007*
 - *Being “Nimble” is an Advantage.....Likely a Necessity*
- ***Can’t Afford “Unleveraged” Opportunities***
 - *Dal-Tile Chose to Get Engaged with Service Design*
 - *Had to Question Paradigms, Accept Some Risks*
- ***M-10 Service Created a Positive Force***
 - *Provided Fresh Alternative to Conventional Modes & Weight Restrictions*
 - *Resulted in a Well Synchronized, Trouble Free Operation*