HOW MANY TIMES A DAY DO YOU ASK YOURSELF THE FOLLOWING?

- Should I take this Load?
  - What makes the most money?
  - Should I take 5 or 20?
- Where are we wasting time?
  - Between Loads?
  - At shippers or consignees?
- Why is…
  - Walter's MPG better than Jorge's?
  - One truck so much better than its twin?
  - This truck did get 9 MPG, now it's getting 7
    - Why didn't we catch it?

YOU HAVE THE DATA, YOU JUST HAVE TO GET TO IT.

BUT... McLeod SOFTWARE

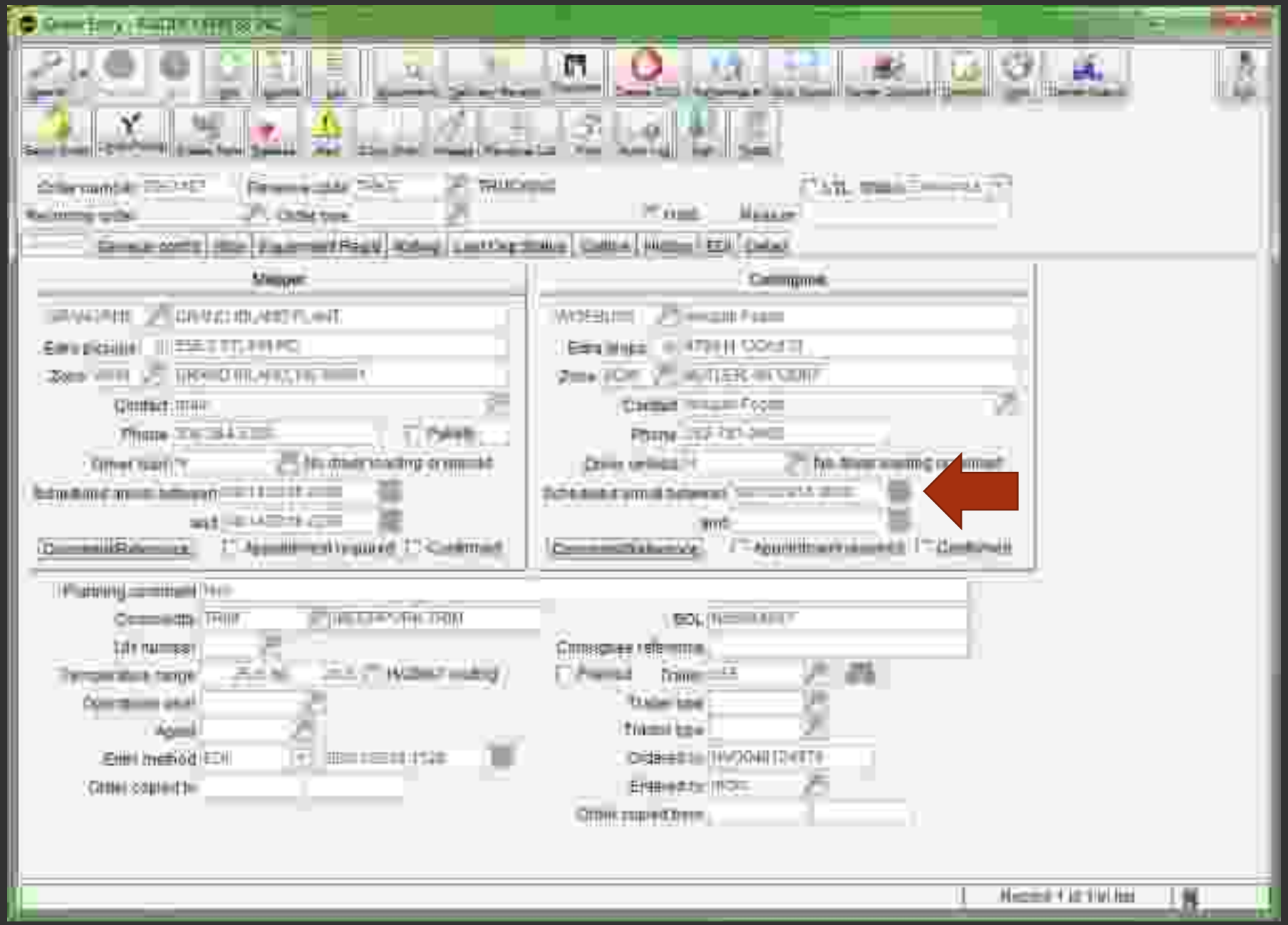
- Too Generic
- Incomplete
  - Lat-Long v. Zip
- Plain Wrong
  - Duplicate time on moves

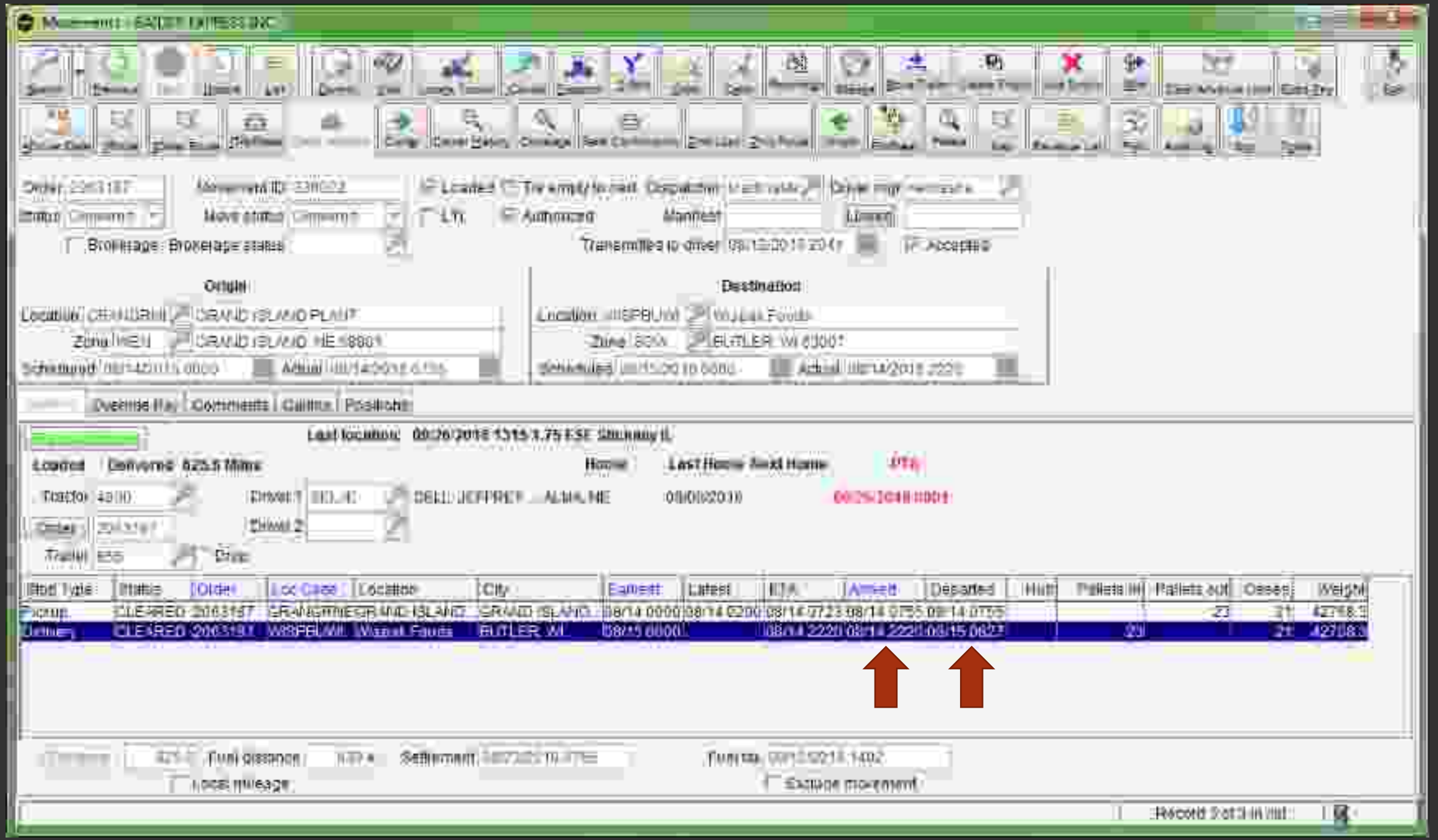
Dwell Time Report

RAIDER EXPRESS INC

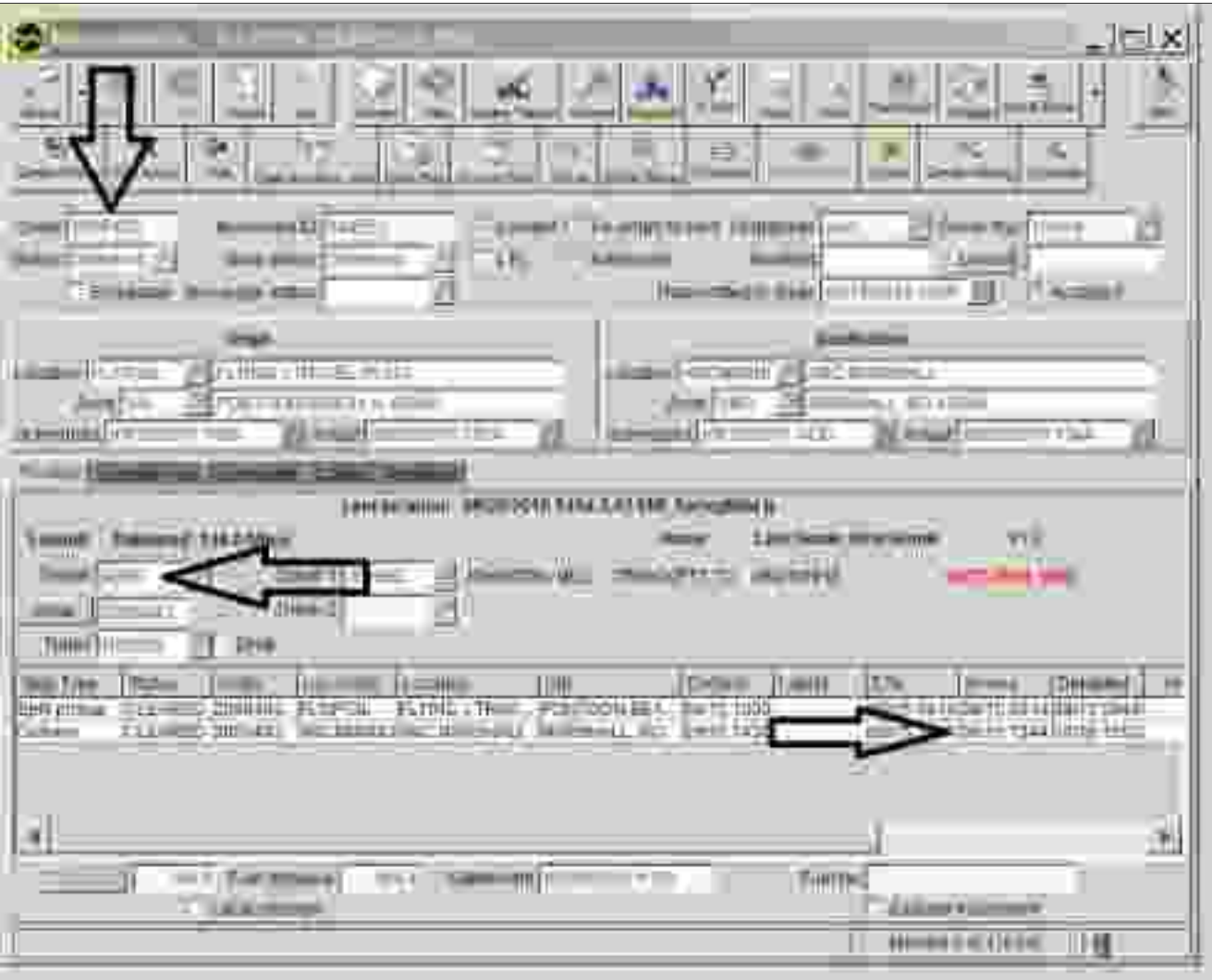
Arrival date: 08/01/2016 - 08/31/2016, Location(s): WISPBUWI, Customer(s): All, Report for: Pickup and delivery, Minimum dwell hours: 1
Minimum dwell minutes: 0, Report by: Location code, Report type: Detailed

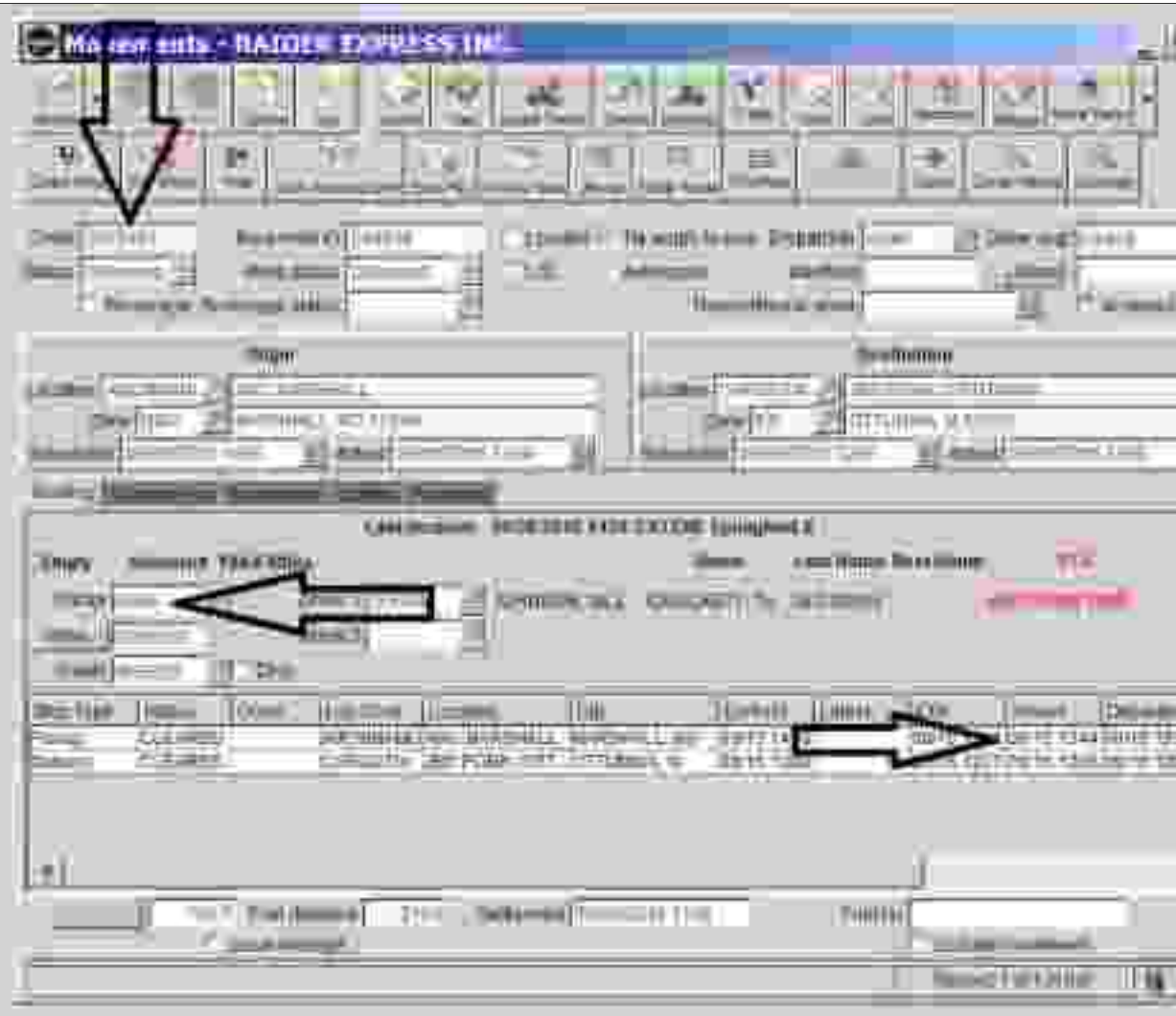
Order	Stop type	Bill-to Code/Name	Driver	Tractor	Trailer	Arrival date/time	Departure date/time	Dwell time
WISPBUWI	**Wispak Foods**							
	BUTLER, WI							
2061848	Stopoff	JBSGRC - JBS	ROEDA	4681	R53548	08/02/2016 1737	08/03/2016 0130	7:53
2063629	Stopoff	JBSGRC - JBS	KEEBR	4834	R53356	08/07/2016 1446	08/08/2016 0956	19:10
2061982	Stopoff	JBSGRC - JBS	PENJOS	4956	R53451	08/09/2016 0507	08/09/2016 1330	8:23
2061981	Stopoff	JBSGRC - JBS	SCHJA	4695	R53467	08/09/2016 1148	08/09/2016 1502	3:16
2063515	Stopoff	JBSGRC - JBS	DELRU	4816	R53445	08/10/2016 1243	08/10/2016 1712	4:29
2063607	Stopoff	JBSGRC - JBS	CLARMI	4898	R53492	08/10/2016 2334	08/11/2016 0730	7:56
2063942	Stopoff	JBSGRC - JBS	MEJJO	4915	R53475	08/11/2016 2112	08/11/2016 2350	2:38
2063187	Stopoff	JBSGRC - JBS	SELJE	4890	855	08/14/2016 2220	08/15/2016 0627	8:07
2063178	Stopoff	JBSGRC - JBS	BRIRO	4892	R53274	08/17/2016 1556	08/18/2016 0916	17:20
2063809	Stopoff	JBSGRC - JBS	CLARMI	4898	848	08/20/2016 0213	08/23/2016 1214	10:01
2063808	Stopoff	JBSGRC - JBS	PETRA	5112	850	08/23/2016 1054	08/23/2016 1925	8:31
2063802	Stopoff	JBSGRC - JBS	CLARMI	4898	R53859	08/29/2016 2319	08/30/2016 1117	11:58
2063801	Stopoff	JBSGRC - JBS	EIBMA	4893	R53864	08/30/2016 0853	08/30/2016 1315	12:22
Location totals:			13 Stop(s)			9:23 Average dwell		122:04




Origin
Destination
Override Rej
Comments
Claims
Positions
Loaded
Delivered
Tractor
Trailer
Bkd Type
Status
Order
Loc Class
Location
City
Earliest
Latest
ETA
Arrived
Departed
Hub
Pallets In
Pallets Out
Cases
Weight
CLEARED
GRAND ISLAND
BUTLER, WI
Total distance
Settlement
Empty movement
Record 2 of 3 in list

JUST PLAN WRONG





WHAT DOES IT TAKE TO CAPTURE THE DATA?

- Very big computer!
  - Dell T630
    - 2 x Intel 3.0Ghz CPU's
    - 128GB RAM
    - 2 x 120GB SSD's - OS
    - 6 x 480GB SSD's – Storage
- Tableau
  - Main software we are using to view the data in different ways
  - Data is taken apart through the ETL (Extract, Transform, & Load) Process.
  - It's then rebuilt into a SQL server database with connections to Tableau.
- SQL Server
  - Used for the storage of the datasets.
- De-normalization of data ETL.
  - Very complex process
  - We need to have some extra people in our corner that can help us along the way.
  - We have chosen *Interworks* as our partner for this part of the Data Warehouse Project.

COST OF PUTTING IT ALL TOGETHER

Costs:

- Hardware: 10 K
- Licensing: 20 K
- Consulting: 50 – 150 K (30 K so far)

Our team of specialist

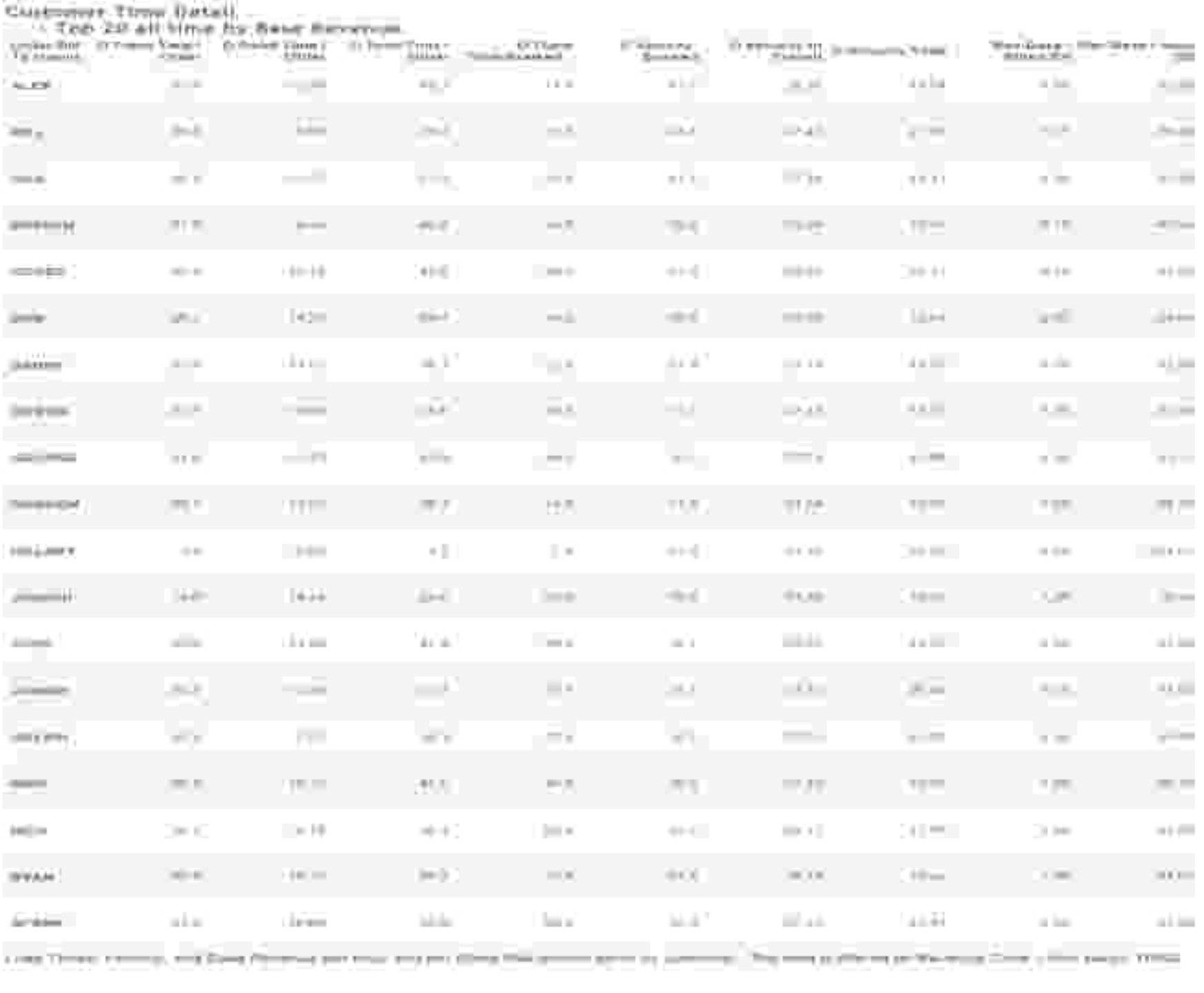
WHAT ARE THE FIRST BITS OF INFORMATION WE HOPE TO GET?

McLeod is 30 years old

- True Velocity & Dwell Time
- Accurate capacity forecasting
- Load selection criteria
- ECM info processing
- MPG trending

Order Time by Customer

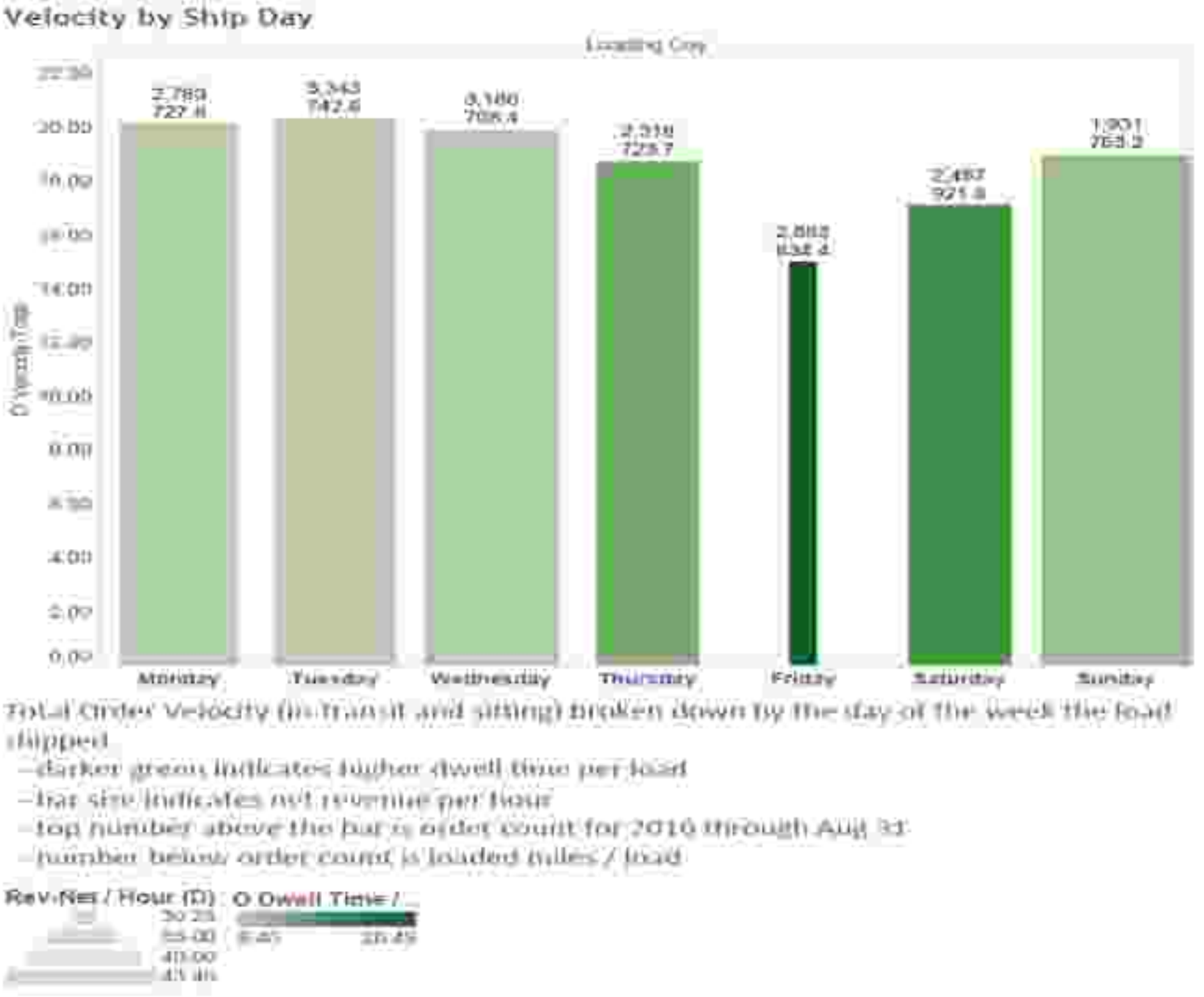
- Very high level Load Time data broken out by customer.
- Very broad in scope, but we can drill down to the finest level of granularity by:
  - Order
  - Customer
  - Tractor
  - Driver
  - Month/Day
  - Commodity
  - Etc.
- All possible with just a couple of mouse clicks.



Velocity by Ship Day

- Still high level view of Load Time
  - Giving us a little bit of a different perspective on Load Times in that we're seeing Velocity based on the day of the week the load shipped.

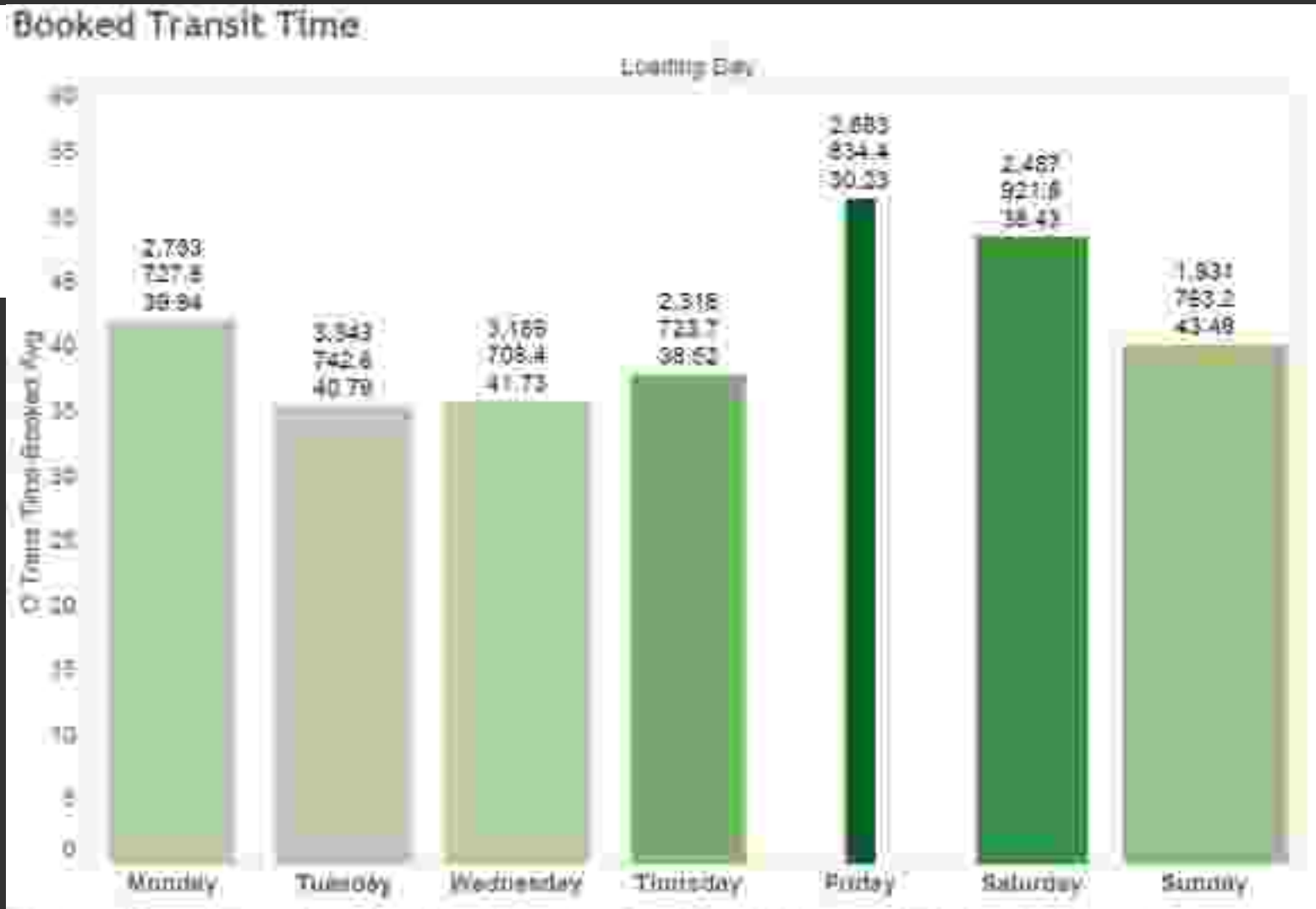
- Notice Friday
  - loads have the lowest velocity
  - Even though they're not the highest in average loaded miles per load
  - The highest concentration of dwell time, and the lowest revenue per hour.
  - Friday is also the 3rd highest volume day.



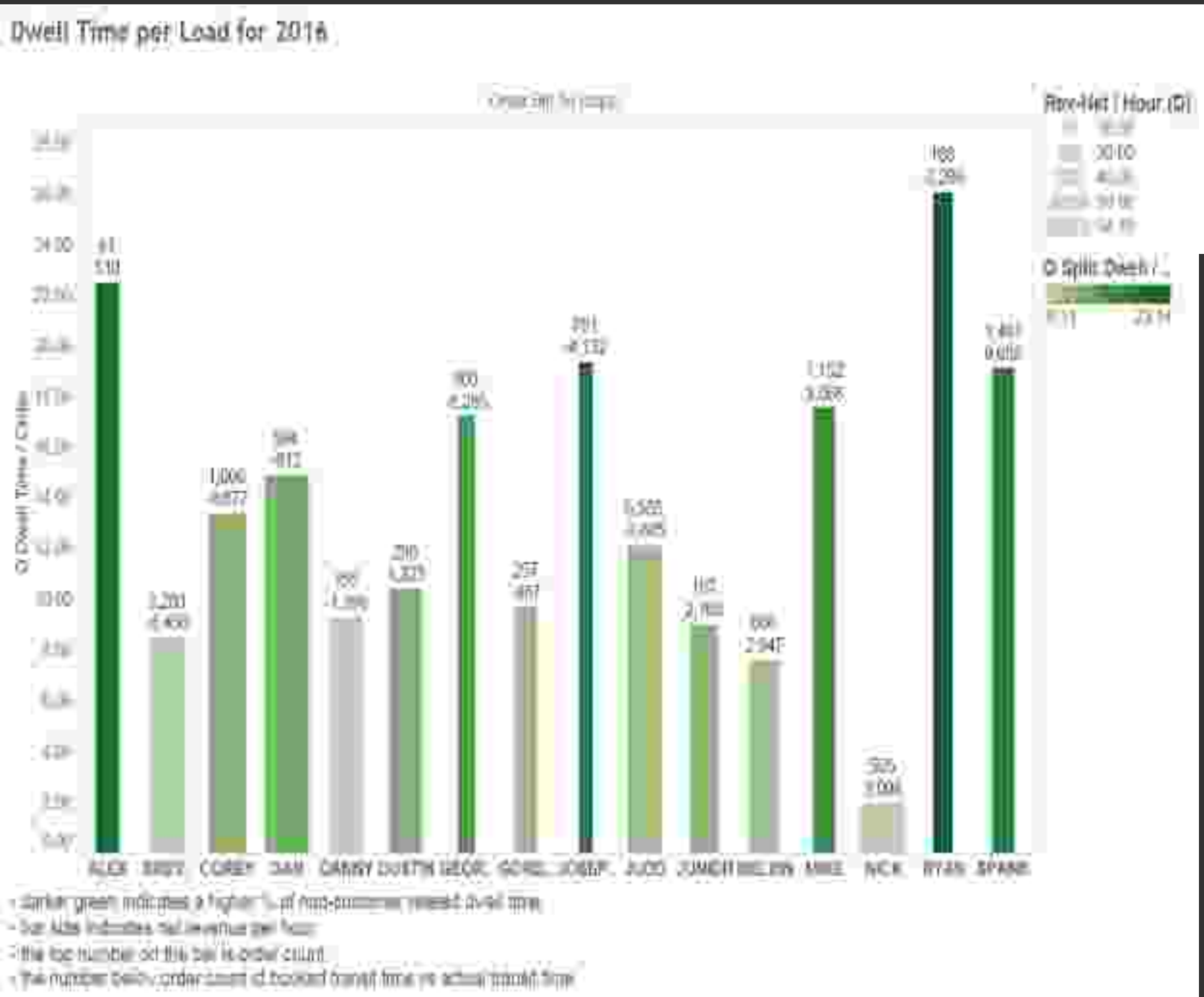
BOOKED TRANSIT TIME

- Similar to the previous slide *except* now we're looking at Booked Transit Time* by day of the week.
  - * ship appointment time to delivery appointment time*

- Friday loads have the highest Booked Transit Time even though they're not the highest in average miles per load.

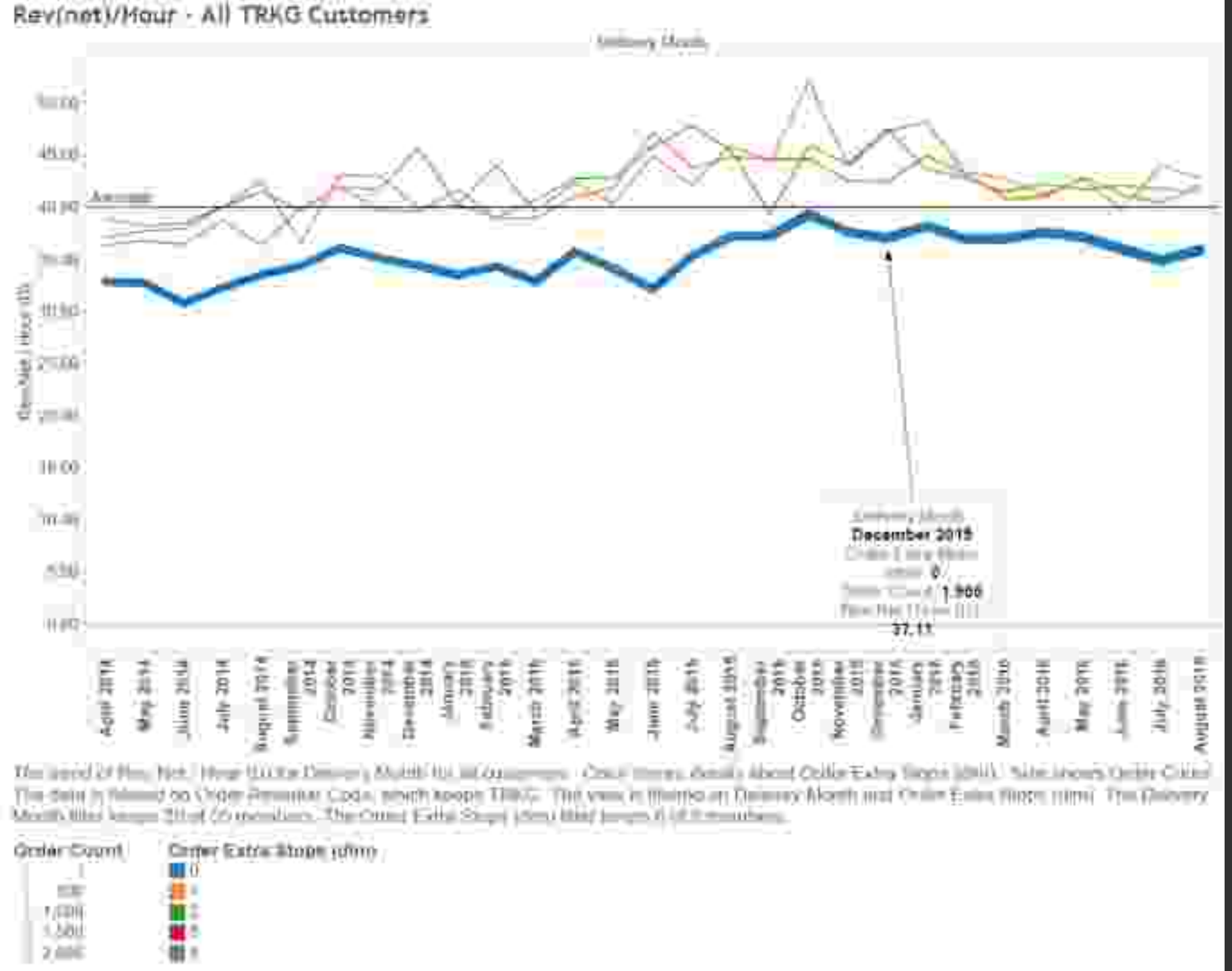


Booked Transit per Load broken down by the day of the week the load shipped.
- darker green indicates higher dwell time per load
- larger bar size indicates higher net revenue per hour
- top number above the bar is order count for 2016 through Aug 31
- number below order count is loaded miles / load
- bottom number is revenue per hour



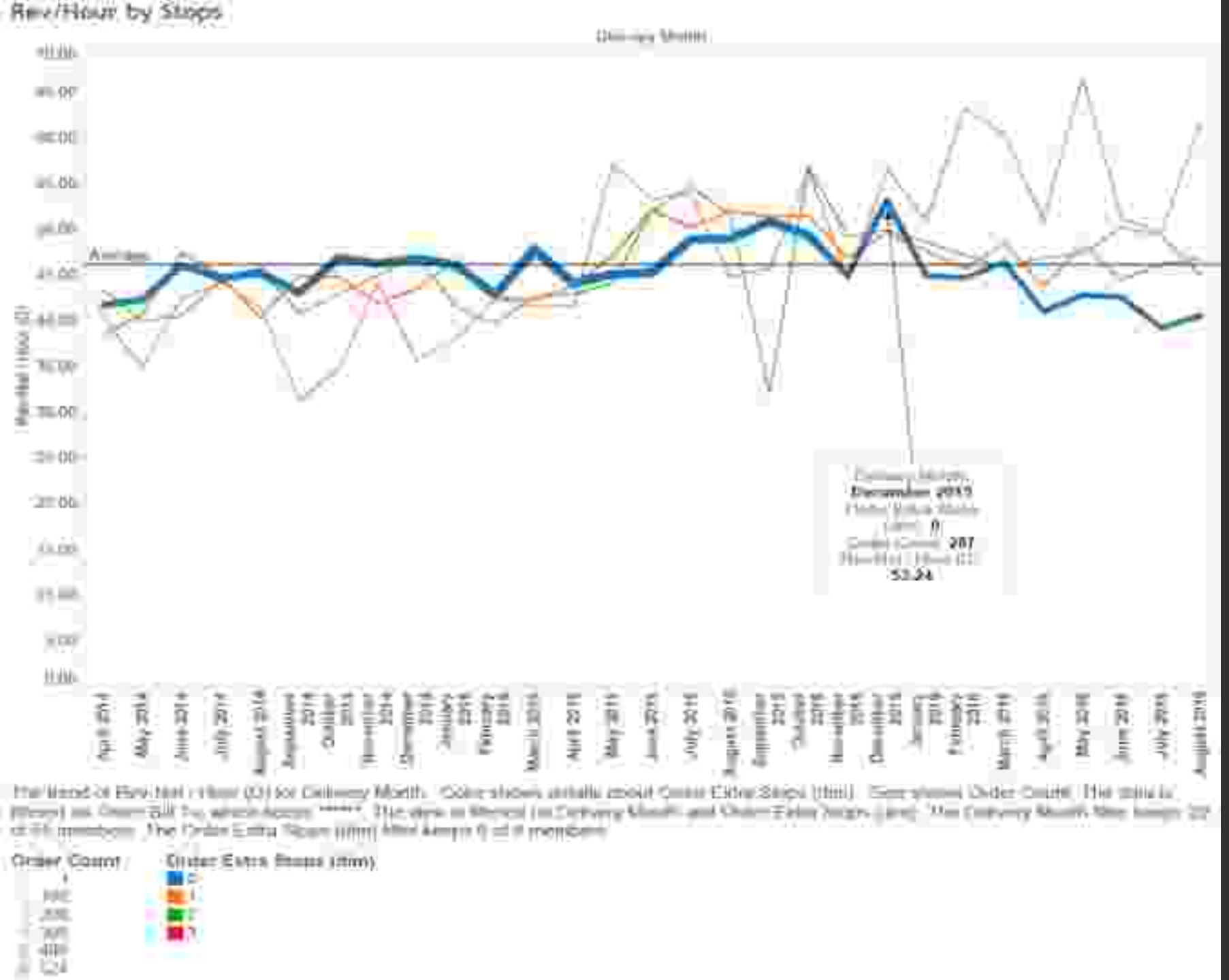
DWELL TIME PER LOAD (2016)

- Little more detailed look at Load Time by customer.
- Here, dwell time per load is the focal point.
- Notice that customer Joseph has a total of 4,132 actual transit hours beyond booked transit hours on 781 loads.
- That means either we're scheduling those loads too tight or the customer is by almost 5 and a half hours per load. And the net revenue per hour sucks!



Net Rev. per Hour by Number of Stops - All Customers

- Net Revenue per Hour for all non-dedicated customers broken out by number of extra stops per load.
- Notice that loads with zero extra stops have the lowest net revenue per hour.
- This is almost counter-intuitive, however we're finding that 0 extra stop loads have the highest percentage of non-customer related dwell time.
- This is time we need to figure out how to drive down.



Net Rev. per Hour by Number of Stops

- Same slide as before, except only for one of our largest shippers.
- Zero extra stop loads have a higher revenue per hour total compared to all customers.
- However the non-customer related dwell time on these loads is much lower.