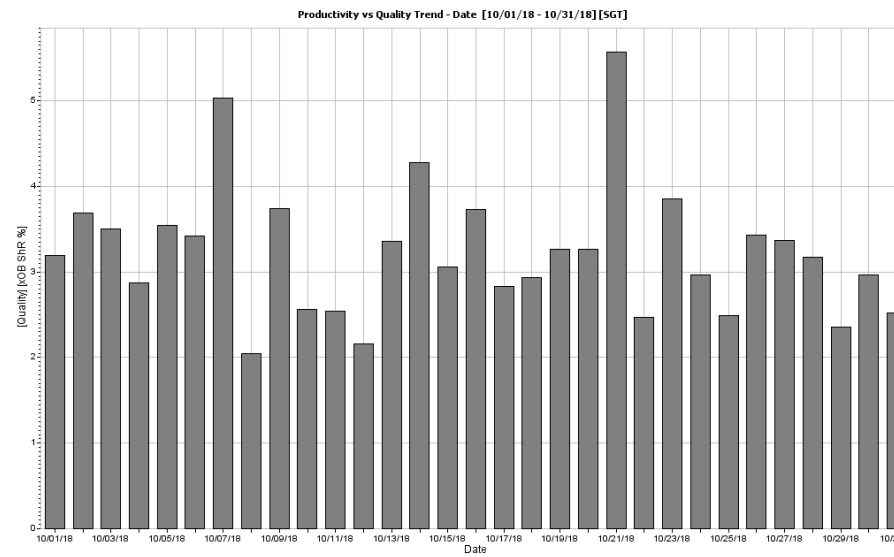
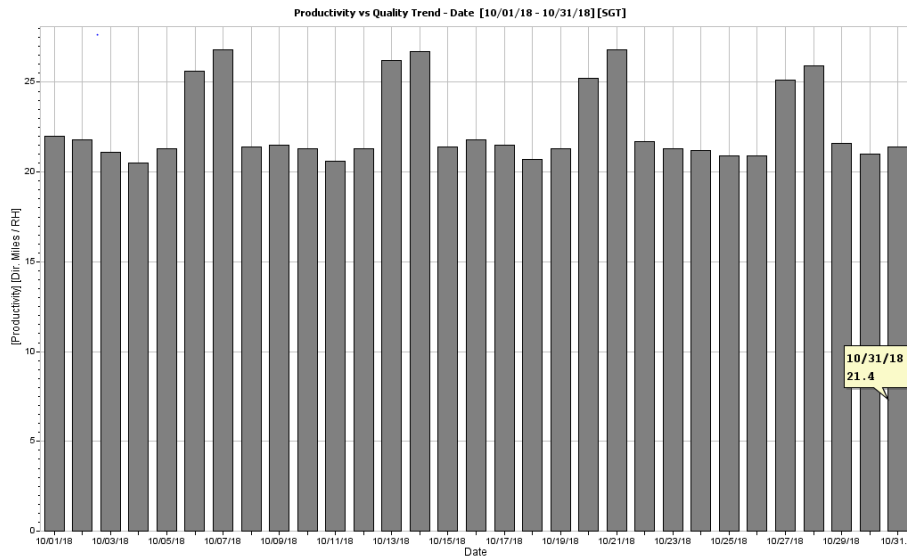


New Paradigms in DRT and Shared MOD Metrics



TSS PARATRANSIT
transportation software solutions



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The Premise

NTD DRT data has had limited usefulness for peer comparisons.

Consider the following examples...

Does NTD DRT data provide insight?

The differences in productivity and unit cost of:

- A DRT service that provides ADA paratransit service
- vs.
- A DRT service that provides ADA paratransit and senior and/or human service agency trips

Does NTD DRT data provide insight?

The differences in productivity and unit cost of:

- An ADA paratransit service using dedicated vehicles only
vs.
- An ADA paratransit service that also used non-dedicated service providers (RVHs measured differently)
 - that uses taxis for 15% of the trips
vs.
 - that uses taxis for 50% of the trips

Does NTD DRT data provide insight?

The differences in productivity and unit cost of:

- An ADA paratransit service with an average trip length of 8 miles vs. 12 miles?
- An ADA paratransit service in an area with light traffic congestion vs. very heavy traffic congestion?
- An ADA paratransit service that has 15% wheelchair trips vs. 30% wheelchair trips?

Does NTD DRT data provide insight?

The differences in productivity and unit cost of:

- A DRT service that provides an ADA paratransit service with no other real options

vs.

- An ADA paratransit service with an alternative service (taxi-subsidy program) for ADA paratransit customers

Our Objective for Today

To begin an advocacy groundswell to change NTD DRT metrics so that they are more useful to practitioners

What Does NTD Ask for?

DRT Performance Data included in NTD:

Revenue Hours & Miles	First P/U to Last D/O less breaks For NDSPs measured when passenger is on board Travel miles during lunch break often included
Vehicle Hours & Miles	Pull-out to Pull-in less breaks For NDSPs vehicle hours & miles = revenue hrs & mi
Passengers	Unlinked Pass Trips (customers, PCAs, companions) Use for calculation of trip length not accurate
Operating Cost	Limited use if alternative services cost is included
Accidents/Incidents	

What Does NTD *Not* Ask for?

Other Performance Statistics:

On-Time Trips*

Requested Trips

Trip Denials*

Reserved Trips

Scheduled Trips

Cancellations

No-Shows

Missed Trips*

Trips with Excessive OB Travel Time*

Complaints

Hold Times*

Other Key Data:

Direct Trip Length

Direct Trip Time

Other Key Information

ADA paratransit only or coordinated

Service mix (DSP vs. NDSP % split)

Ambulatory vs. wheelchair trip % split

Alternative services trip stats, cost data

Microtransit trip stats, cost data

*Patterns of which may indicate capacity constraints

What Do Shortcomings Suggest? Part 1

Further breakdown of paratransit statistics (Just DRT is not enough!)

- ADA paratransit vs. Non-ADA paratransit? Still too broad.
 - Non-ADA paratransit would include premium service trips, alternative service trips, coordinated trips sponsored by 3rd parties, and general public trips on microtransit services
 - ADA paratransit stats for DSP and NDSP still co-mingled.
- How about DRT stats by mode / program?
 - Dedicated fleet: ADA paratransit trips vs. non-ADA paratransit trips
 - Non-dedicated fleet: ADA paratransit trips vs. non-ADA paratransit trips
 - Transit-sponsored alternatives services (for ADA paratransit customers)
 - Micro-transit services

What Do Shortcomings Suggest? Part 2

For Productivity – three new measures that will aid comparisons:

- Direct miles per RVH helps correct for differences in average trip length
- Direct travel time per RVH helps correct for differences in local congestion
- Number of trips requiring a wheelchair accessible vehicle

How difficult to collect?

- Fairly easy with software products that dispatch using Google Maps or equivalent
- For others, Google Maps or equivalent can be used to obtain this information for a random sample of trips at the time of the trip

Examples

Fleet	Trips	Dir Miles per Trip	Dir Miles per RVH	Trips per RVH	Shared Trips	Shared Ride %	On-Time %	XOB%
DSP	1,658,159	9.6	11.7	1.2	1,037,229	62.55%	91.15%	17.22%
NDSPs	1,737,205	12.6	25.3	2.1	1,105,476	63.64%	94.44%	8.60%
Total	3,395,364	10.8	16.8	1.6	2,142,705	63.11%	92.83%	12.68%

Provider	DSP Trips Only	Dir Miles per Trip	Dir Miles per RVH	Trips per RVH	Shared Trips	Shared Ride %	On-Time %	XOB%
1	468,200	10.2	11.2	1.1	334,950	71.53%	90.79%	34.00%
2	415,569	10.7	13.9	1.3	259,422	62.43%	91.47%	6.58%
3	371,145	8.1	10.4	1.3	222,559	85.81%	89.60%	19.10%
4	244,218	9.0	10.2	1.1	141,648	58.00%	92.26%	7.57%
5	158,947	9.1	13.7	1.5	78,650	49.48%	93.32%	0.13%
Total	1,658,159	9.6	11.7	1.2	1,037,229	62.55%	91.15%	17.22%

Next Steps

- To build a consensus among industry practitioners
- A fast-track TCRP research effort?

Thank You!

Please visit our website: <https://tssparatransit.com>

And look for related discussions under Will's Pub on the Blog Tab:

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