DATE:	January 26, 2017
TO:	Chris Haefner, Manager, Material Management
FROM:	Arleen Schilling, Program Evaluation and Audit Director Guptan Kaplingat, Program Evaluation and Audit Project Team Lead
SUBJECT:	2016 Metro Transit Stockroom Inventory Audit

As part of Program Evaluation and Audit's annual audit of Stockroom inventories, our personnel conducted physical inventory counts of four Metro Transit Facilities' stockrooms: Electronic Repair, Heywood Garage, East Metro garage and Northstar. The Thrive MSP 2040 principle of accountability includes a commitment to monitor and evaluate the effectiveness of our policies and practices toward achieving shared outcomes and a willingness to adjust course to improve performance. The purpose of this audit, in alignment with the accountability principle, was to conduct an inventory audit of the stockroom and confirm the accuracy and completeness of the inventory records.

On December 12 and December 15, 2016, using stratified random sample created from the complete inventory list, our office conducted physical counting of the chosen inventory items and compared it to Txbase stated inventories to identify discrepancies. The sample size of each garage is as follows:

Electronic Repair:	219 (9%)
Heywood Garage:	182 (7%)
East Metro Garage:	174 (6%)
Northstar:	234 (8%)

Audit also reviewed Stockroom and Materials Management policies and procedures.

## Results

After the completion of Audit's initial physical count, both Material Management's Manager along with the respective Lead Stock keeper conducted a follow-up research to identify and explain the variances. The primary reason for variances was that items were either not charged to inventory when taken or were not credited back into inventory when not used or returned. This totaled 52.83% of the item variances. The next highest "reason for variance" fell under "unknown reason", accounting for 33.96% of variances. Table 1 summarizes the variances by stockroom and garage.



Та	ıbl	e	1

		Judgmental Sample - Reason For Variance					
		Reason	Not	Found in	Errors		
	No. of	Not	Charged	Different	on previous		
Stockroom	Var.	Known	Out/In	Location	Cycle Count	Misc.	Total
1 - 3329 Electronic Repair	11	4	6		1		11
2 - 3324 Heywood		2	1	2		1	6
3 - 3336 EastMetro	35	12	20	1	2		35
4 - 4361 Northstar	1	0	1				1
	53	18	28	3	3	1	53
		33.96%	52.83%	5.66%	5.66%	1.89%	

Variances were based on these 18 items with "unknown reason". The results were graded against two variances: Absolute Dollar Variance and Item Number Variance. These results were compared to previous year's results, in this case, 2013. Audit also compared the current year's results with previously defined "acceptable range"<sup>1</sup>. The acceptable variance factor is 1.5% for Absolute Dollar Variance and 3.0% for Item Number Variance.

All four garages audited had Absolute Dollar Variance less than the 1.50% variance ceiling. It should also be noted that the Absolute Dollar Variance in all garages has gone down significantly except for East Metro which went down moderately from 0.46% to 0.30%.

	Total						
Stockroom		r. Value	Total Cost	2013 Results	Dollar Var. %	Var. Ceiling	Diff. (+ or-)
1 - 3329 Electronic Repair	\$	(26.29)	\$615,567.16	0.82%	0.004%	1.50%	1.496%
2 - 3324 Heywood	\$	(22.12)	\$298,118.37	1.05%	0.01%	1.50%	1.49%
3 - 3336 EastMetro	\$	307.31	\$103,649.16	0.46%	0.30%	1.50%	1.20%
4 - 4361 Northstar	\$	-	\$822,868.46	1.00%	0.00%	1.50%	1.50%
	\$	258.90	1,840,203.15		0.01%		

## Table 2

All three garages except for East Metro had Item Number Variance less than the 3.00% variance ceiling. Item Number Variance for all garages has decreased significantly except for East Metro, which has increased from 6.21% to 6.90%.

<sup>&</sup>lt;sup>1</sup> Acceptable range is an agreed upon variance factor that is used to evaluate inventory effectiveness and efficiency. Audit along with Finance management and the Materials Management manager came up with this variance ceiling in 2013.

## Table 3

	No. of					
Stockroom	Var.	Total Sample	2013 Results	ltem Var. %	Var. Ceiling	Diff. (+ or-)
1 - 3329 Electronic Repair	4	219.00	6.95%	1.83%	3.00%	1.17%
2 - 3324 Heywood	2	182.00	3.26%	1.10%	3.00%	1.90%
3 - 3336 EastMetro	12	174.00	6.21%	6.90%	3.00%	-3.90%
4 - 4361 Northstar	0	234.00	0.66%	0.00%	3.00%	3.00%
	18	809.00		2.22%		

## Conclusions

All four garages audited had a decrease in Absolute Dollar Variance from 2013 and also fell under the 1.50% variance ceiling.

All Metro Transit stockroom rooms audited have improved significantly except for East Metro, which had an increase in Item Number Variance by 0.69% (6.21% to 6.90%) from 2013 and also went over the Item Number Variance ceiling by 3.90%. Continuing to provide additional training to Material Management and Bus Maintenance personnel at the East Metro Garage to increase awareness of and adherence to all inventory procedures and controls could potentially improve their performance.

Audit will continue to monitor the daily cycle count conducted by all garages and conduct an annual inventory of the stockrooms based on cycle count variances and the number of years since the last audit was conducted.

**CC:** Brian Lamb, Metro Transit General Manager Ed Petrie, Director of Finance Steve True, Accounting Manager Rob Milleson, Director of Bus Maintenance