

**Presentation to the Audit Committee
June 27, 2017**

**Review of Toronto Transit Commission
Procurement Policies and Practices:**

**Improving Materials Management and
Purchasing Policies Can Potentially Result
in Significant Savings**

**Beverly Romeo-Beehler, CPA, CMA, B.B.A., JD, ICD.D, CFF
Auditor General**

**Jane Ying, CPA, CMA, CIA, CGAP, MHSc
Assistant Auditor General**

**Claire Mu, CFA, CPA (U.S.), CISA, CGAP, MFin, MMPA
Acting Senior Audit Manager**



**Auditor General's Office
Integrity, Excellence and Innovation**

Background – Staffing and Budget



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Purchasing & Sales
(P&S)

29

\$2.7 M

Materials
Management(MM)

184

\$16.8 M

- ▶ P&S procures just over \$300M per year for TTC's day-to-day operations, excluding bulk fuel purchases

Audit Objectives and Scope

- ▶ To assess whether TTC's procurement policies, procedures and practices are fair, transparent, and cost-effective achieving the best overall value
- ▶ In-depth review of Purchasing and Sales and extended into areas of Materials Management
- ▶ Periods of data analyzed and reviewed:
 - Purchase data and files - January 2015 to June 2016
 - Operational data - January 2016 to March 2017

Audit Findings

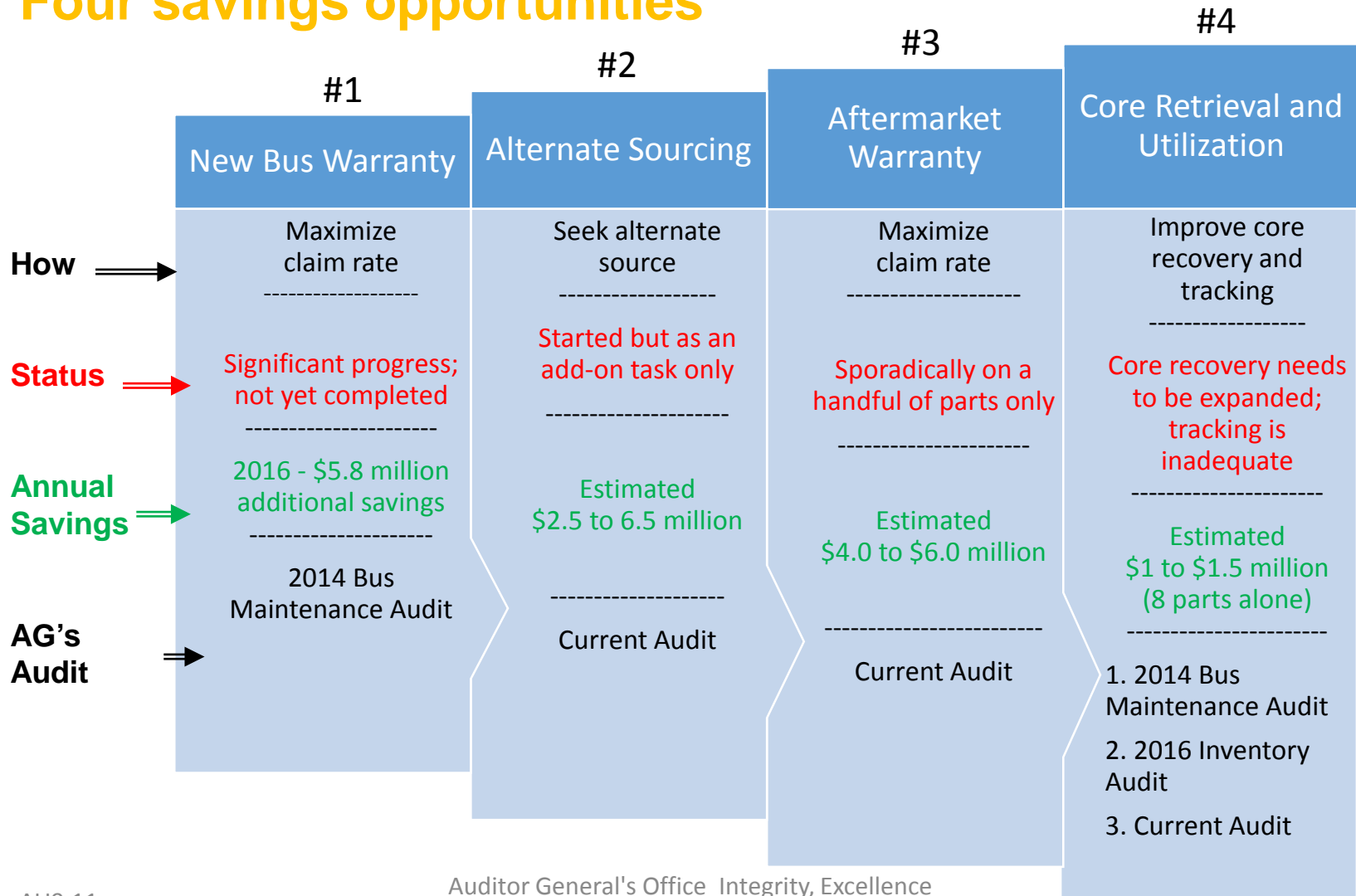
A – Improving Vehicle Parts Management Can Potentially Result In Significant Cost Savings

B – Addressing Chronic Parts Shortage Issue To Improve Service Level and Reduce Future Costs

C – Current Procurement Policies and Processes Need A Full Review

A - Improving Vehicle Parts Management Can Potentially Result In Significant Cost Savings

Four savings opportunities



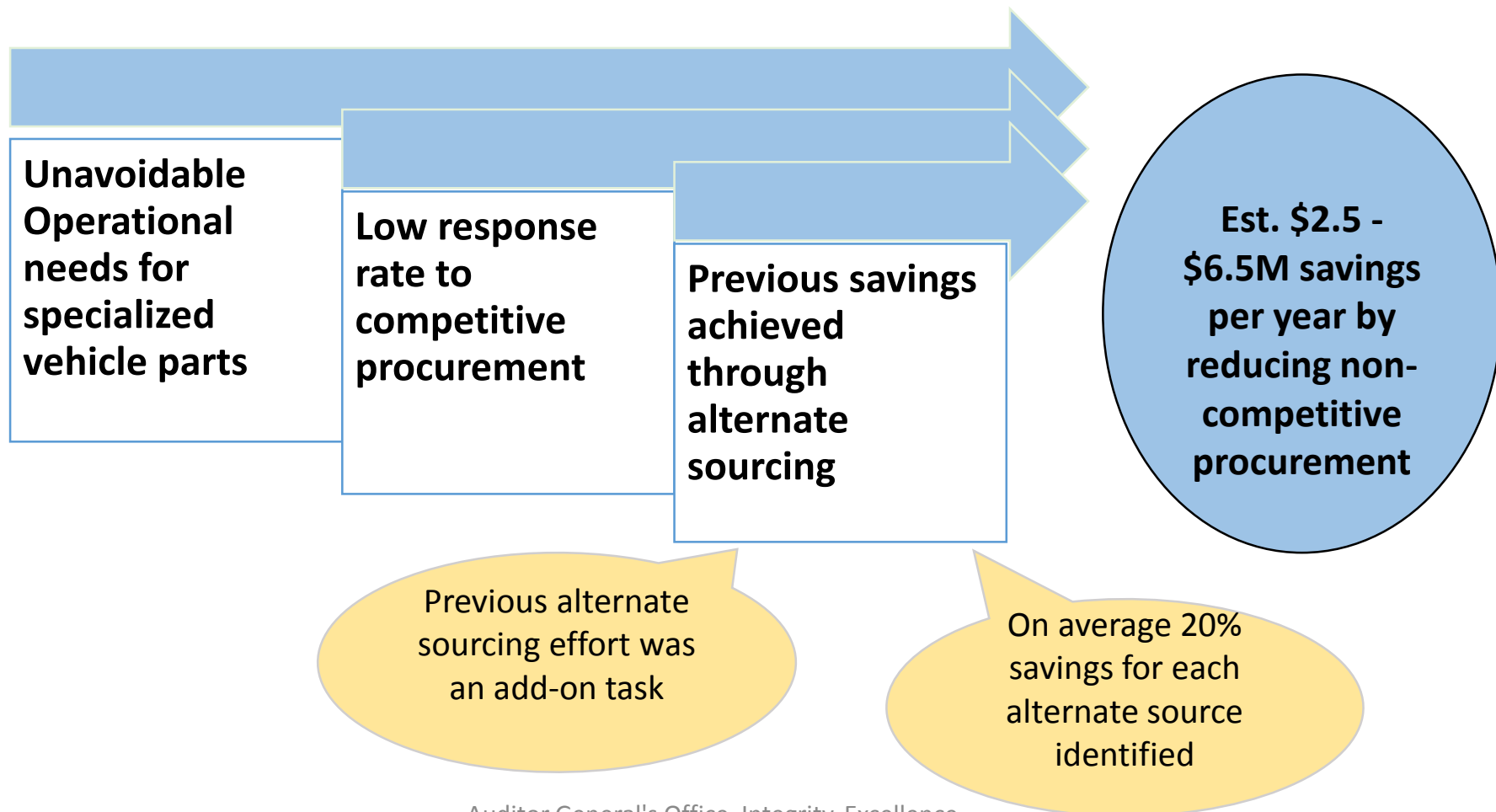
A – Improving Vehicle Parts Management Can Potentially Result In Significant Cost Savings

#1 Realized savings from improving new bus warranty

- ▶ **Realized** additional savings as a result of improving the new bus warranty process
 - 2016 Incremental Savings: \$5.8M
- ▶ These savings are expected to recur as long as TTC continues its steady state new bus procurement strategy
- ▶ As a result of the improved warranty process, bus manufacturers provided proactive repairs to many buses; the value of this work totaled approximately \$8M in 2016

A – Improving Vehicle Parts Management Can Potentially Result In Significant Cost Savings

#2 Expand alternate sourcing



A – Improving Vehicle Parts Management Can Potentially Result In Significant Cost Savings

#3 Aftermarket parts warranty

TTC has a standard one year warranty clause for aftermarket parts; warranties for certain parts are longer than one year



Currently TTC does not systematically pursue aftermarket parts warranty (except for a handful of parts)



By foregoing warranty claims, TTC misses an opportunity to realize significant annual cost savings (potentially \$4M to \$6M per year)

Why??

No one department has assumed the responsibility of claiming aftermarket parts warranty

A – Improving Vehicle Parts Management Can Potentially Result In Significant Cost Savings

#4 Core retrieval and utilization

A Core is a defective part that can be rebuilt to new standards



A core accounts for 25% to 74% of the cost of a part

At TTC, it can be used for

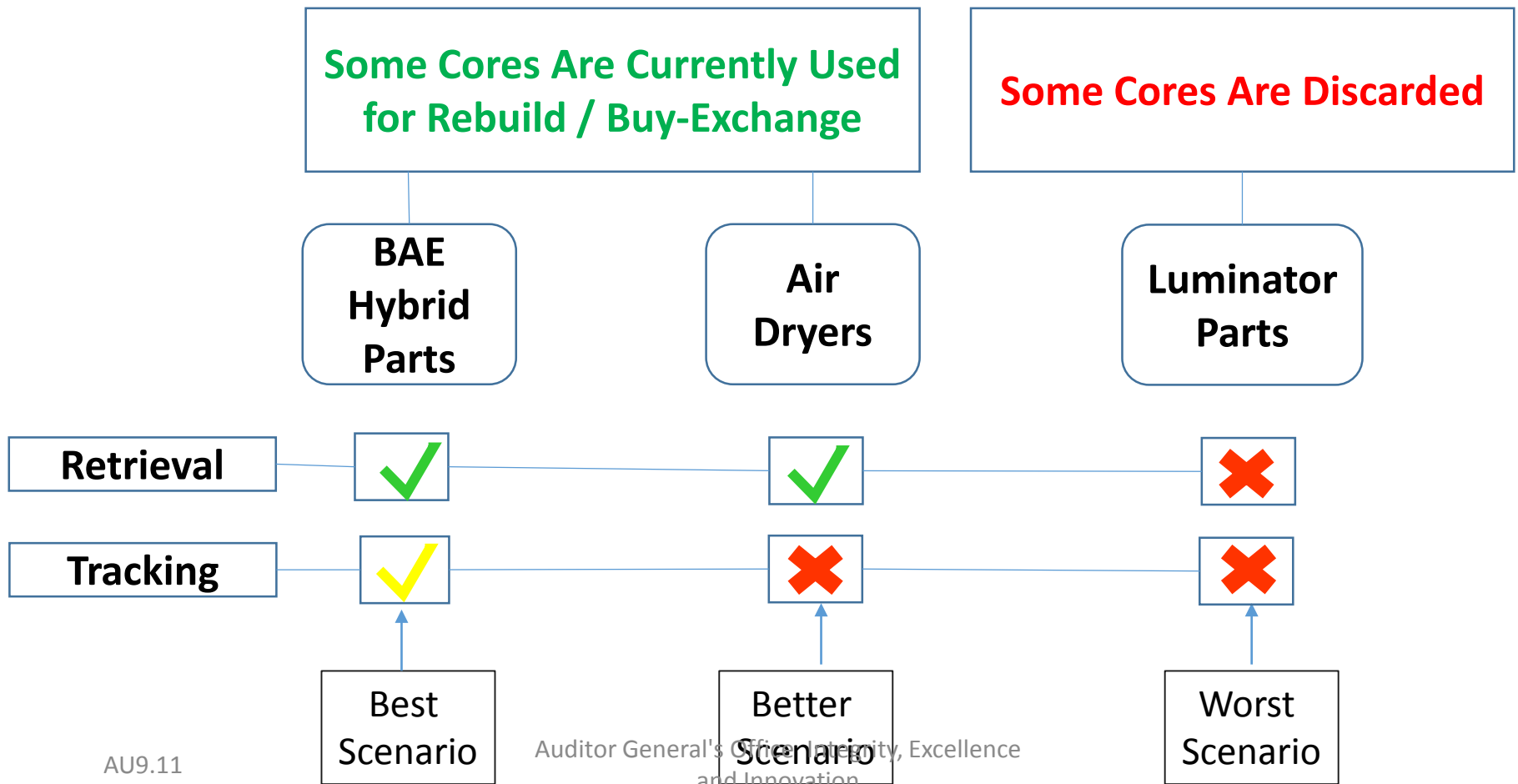
**Internal or External
Rebuild Program**

**Buy-Exchange to waive
the core charge**

A – Improving Vehicle Parts Management Can Potentially Result In Significant Cost Savings

#4 Core retrieval and utilization

Existing Core Management Process at TTC for Different Vehicle Parts



A – Improving Vehicle Parts Management Can Potentially Result In Significant Cost Savings

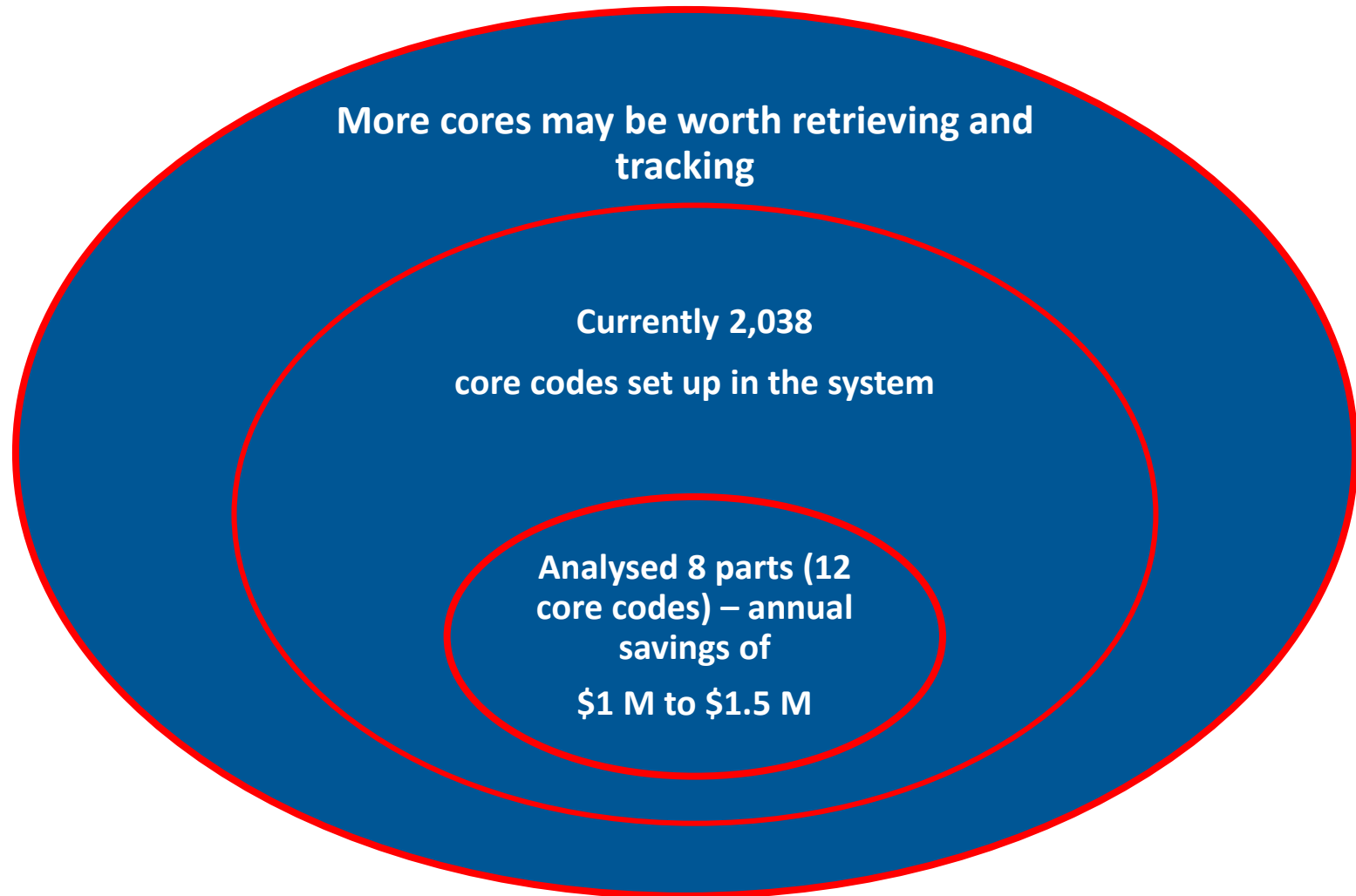
#4 Core retrieval and utilization

When there is no adequate controls on retrieval or tracking of cores, TTC risks losing cores. For instance, some of the Air Dryer cores were sitting outside exposed to harsh weather conditions for a year



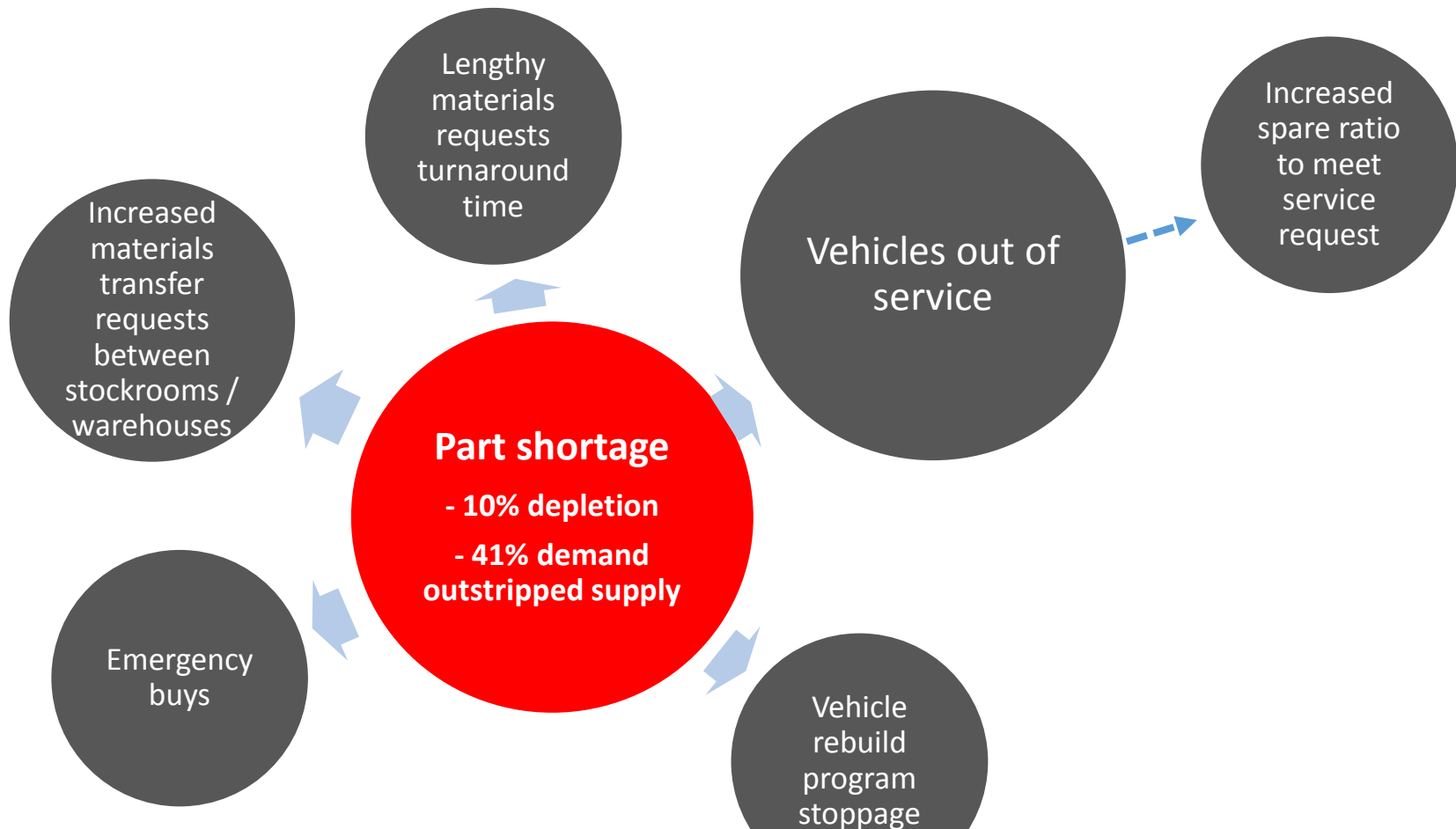
A – Improving Vehicle Parts Management Can Potentially Result In Significant Cost Savings

#4 Core retrieval and utilization



B – Addressing Chronic Parts Shortage Issue Can Improve Service Level and Reduce Future Costs

Parts shortages and their direct and indirect impacts



B – Addressing Chronic Parts Shortage Issue Can Improve Service Level and Reduce Future Costs

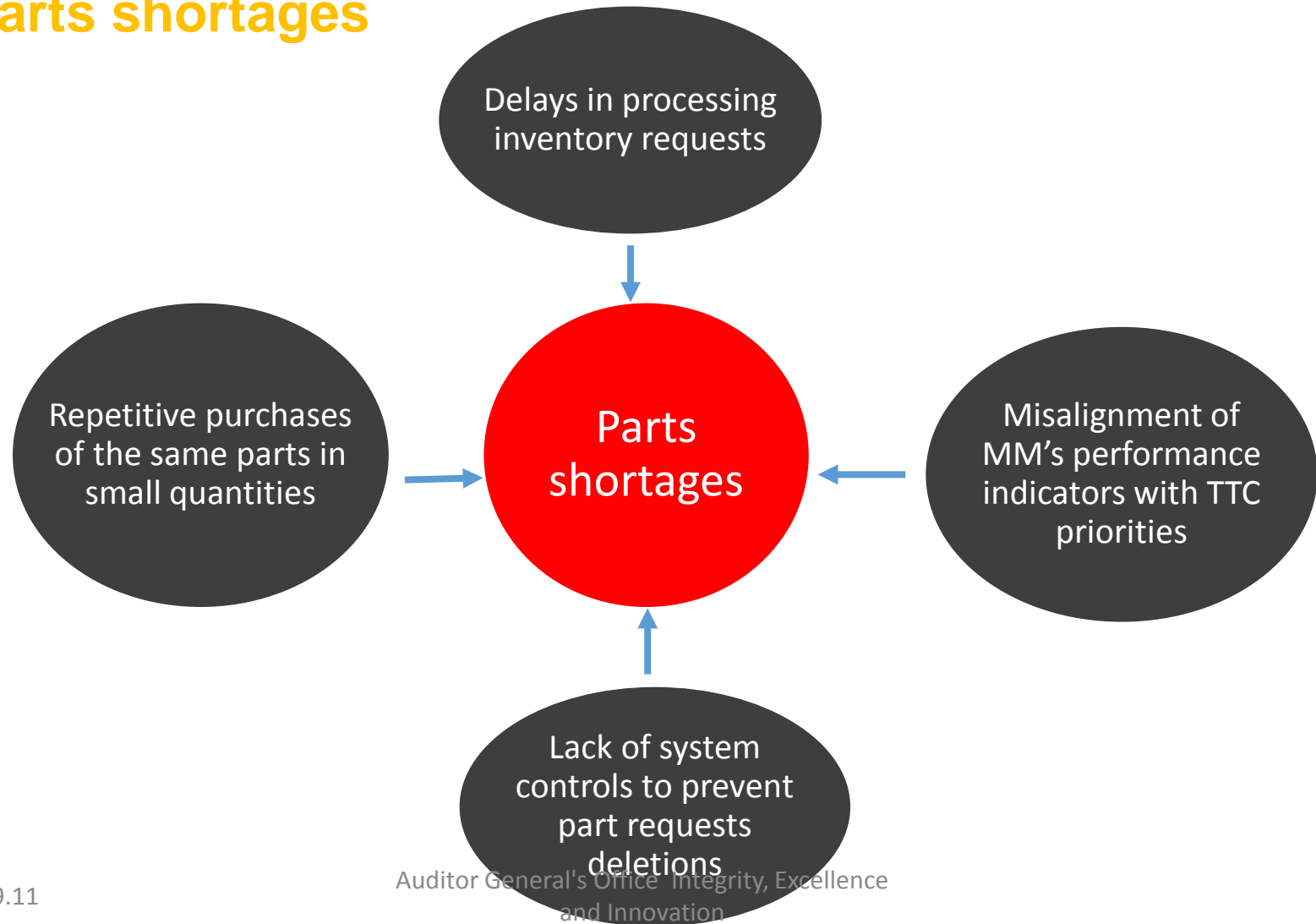
Idle vehicles waiting for parts

From July to December 2016, on average 34 vehicles or \$68 million worth of assets were out of service daily due to parts shortages

	Number of Vehicles
Streetcars	7.7
Subway	0.7 train (4 subway cars)
Buses	25.7
Total	34.1

B – Addressing Chronic Parts Shortage Issue Can Improve Service Level and Reduce Future Costs

Practices and factors that might have contributed to parts shortages



B – Addressing Chronic Parts Shortage Issue Can Improve Service Level and Reduce Future Costs

Lengthy materials requests (MRs) turnaround time

What customers care:
Quick materials requests
turnaround

What Materials Management
measures and reports:
Materials Fill Rate

Turnaround Time	Duncan Shop	Greenwood Shop
Same day or next day	54%	68%
3-5 days	22%	10%
6-10 days	4%	2%
Over 10 days or outstanding	19%	20%

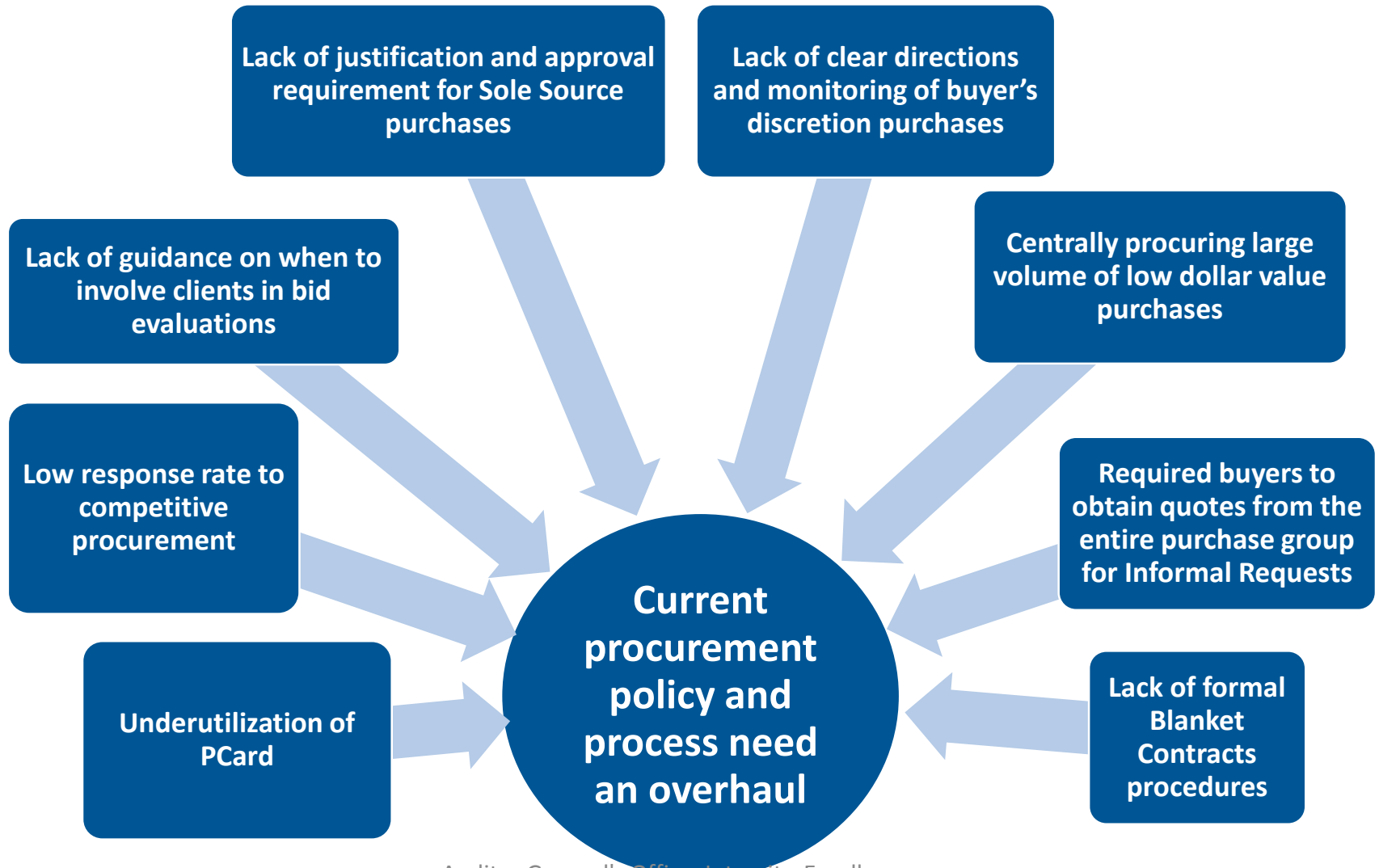
Fill Rate – the time between a materials request is “picklisted” to the time of the delivery

Reported fill rate: 83-90%
within one day (August to
November 2016 Dashboard)

Materials sometimes did not get
“picklisted” until days after
receiving the requests from
maintenance

C – Current Procurement Policies and Processes Need a Full Review

Issues of TTC's procurement practices



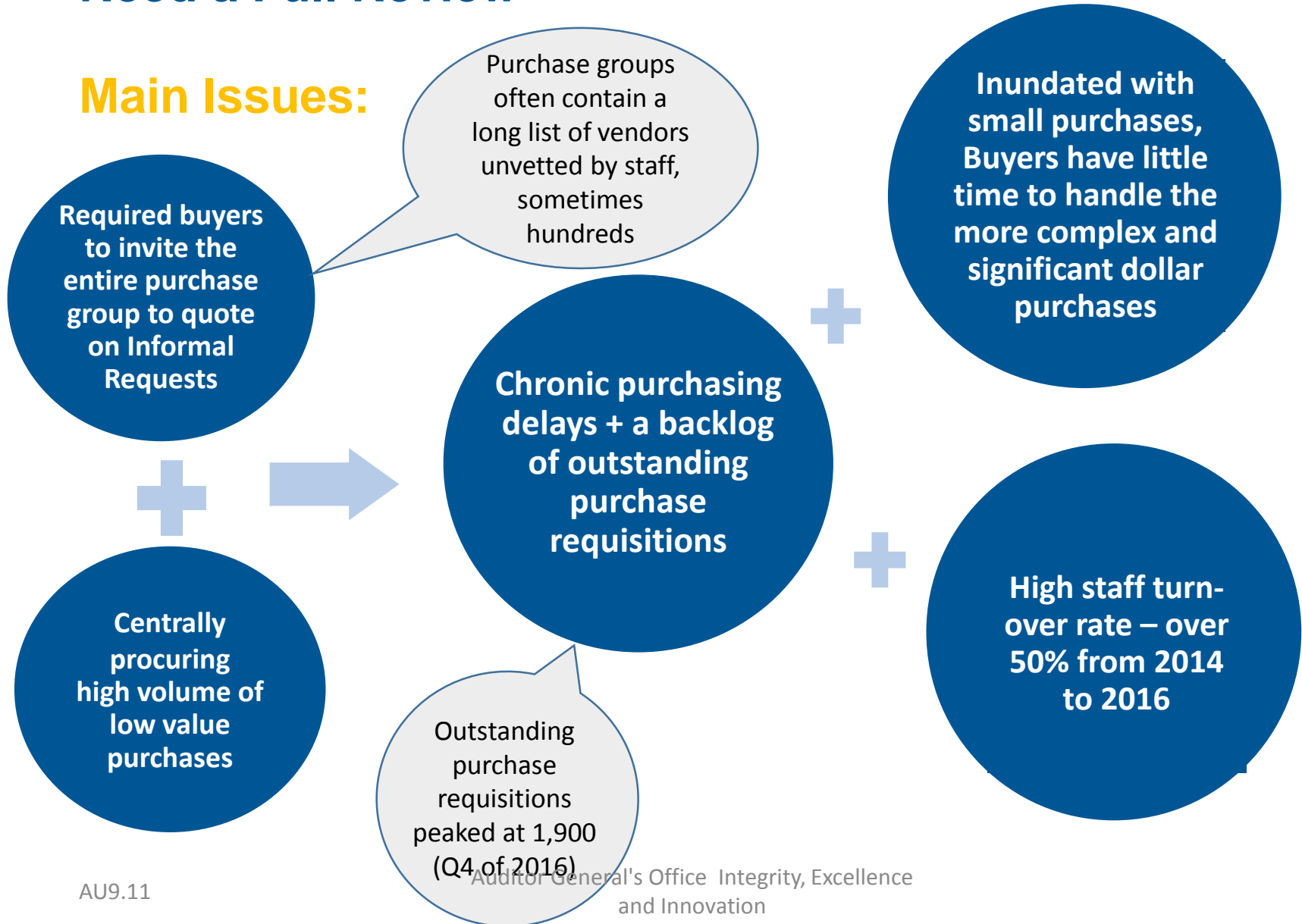
C – Current Procurement Policies and Processes Need a Full Review

TTC's purchase methods and dollar thresholds

Dollar Value Thresholds	Procurement Method	Competitive Process (Yes or No)
\$5,000 or less	Purchase Card (PCard)	No
Currently \$10,000 or less (lowered to \$4,000 in Jan 2016; raised back to \$10,000 in November 2016)	Buyer's Discretion	No
Greater than \$10,000 and up to \$100,000	Informal Requests	Yes
\$100,000 or greater	Formal Requests	Yes
No Threshold	Sole Source Requests	No
Pre-approval based on thresholds	Single Source Requests	No

C – Current Procurement Policies and Processes Need a Full Review

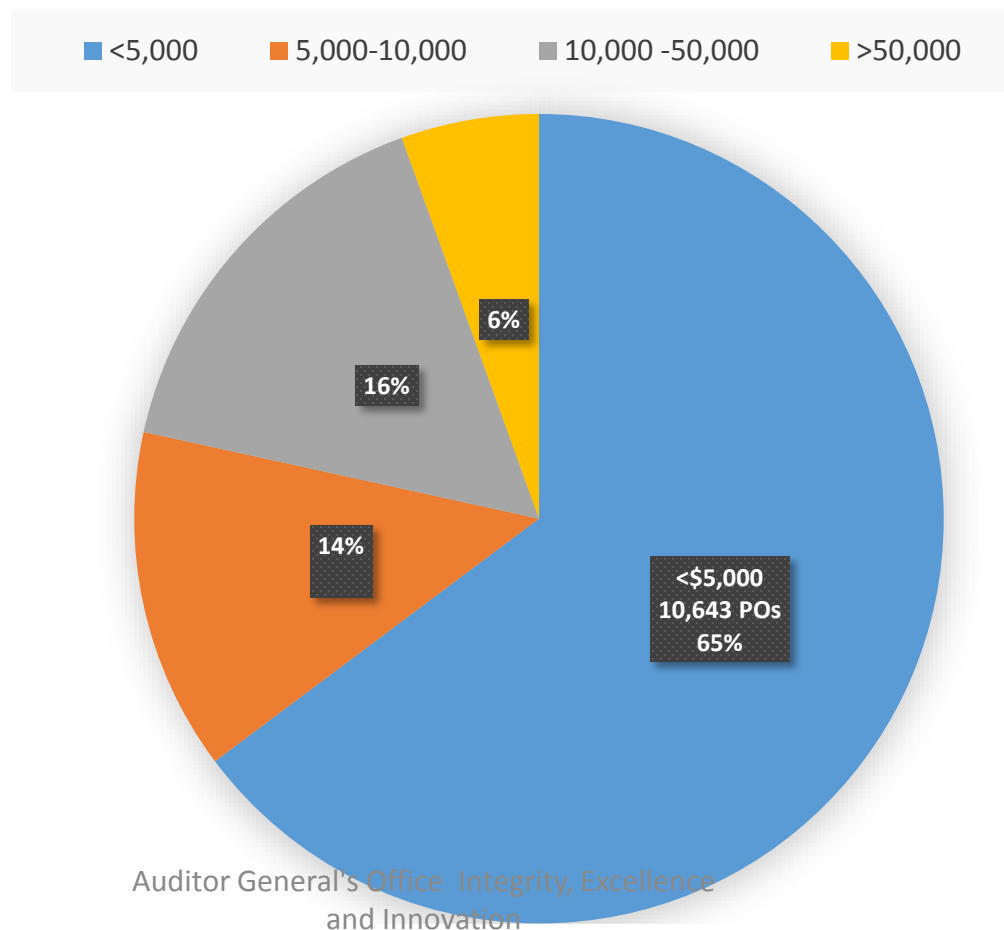
Main Issues:



C – Current Procurement Policies and Processes Need a Full Review

Centrally procuring high volume of low value purchases

**Manual Orders Break-down by Purchase Value
January 2015 to June 2016**



C – Current Procurement Policies and Processes Need a Full Review

Low vendor response rate for competitive procurement

Informal Requests:

20 out of 50 sampled
files received one
compliant bid

Formal Requests:

2.7 bids received vs.
4.7 bids for each
tender by
MBNCanada

Impact on price
competitiveness

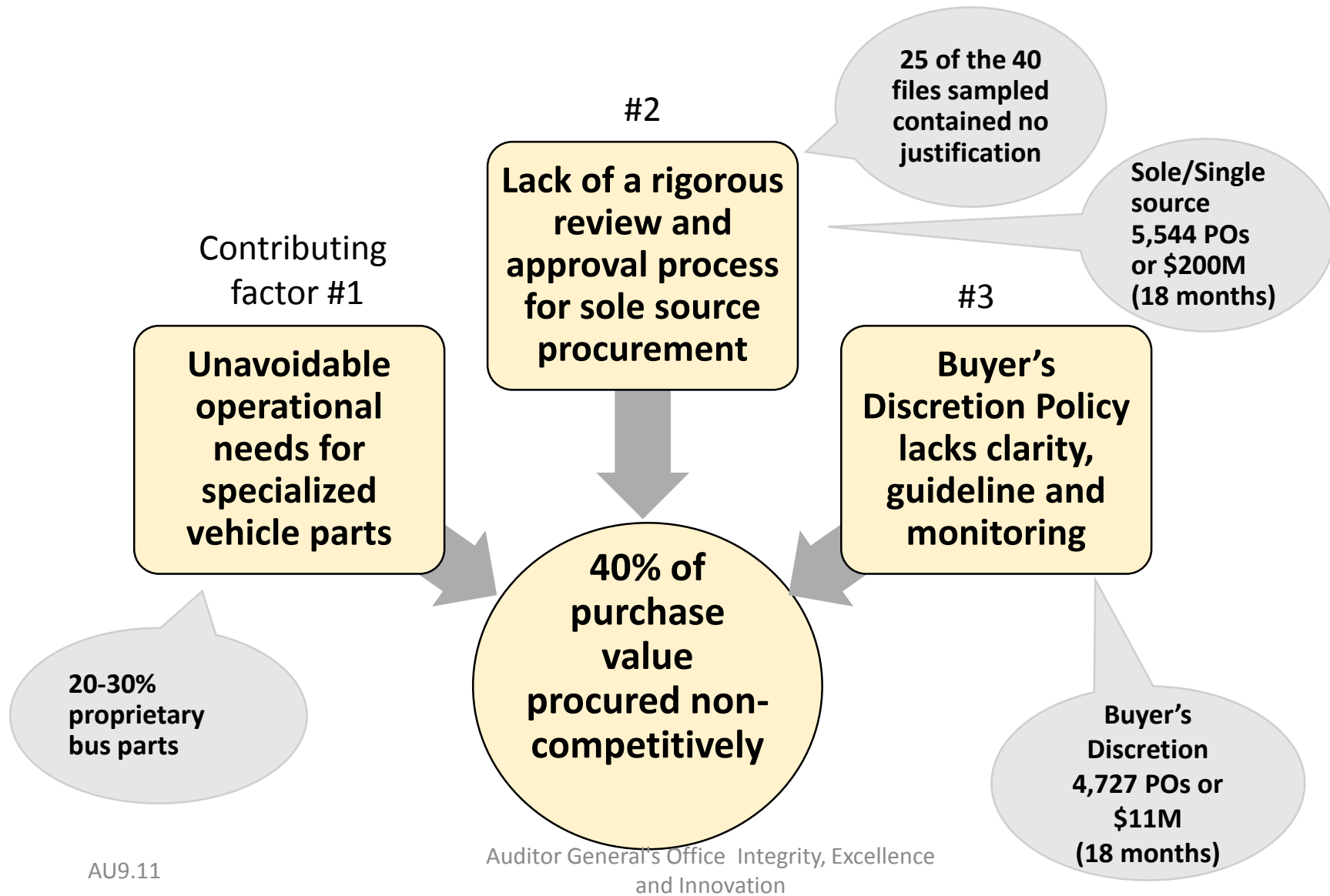
- ▶ What did vendors say?
 - Short tender response time and / or complex specifications
 - Lack of free viewing of tender documents

File
review

Vendor
survey

C – Current Procurement Policies and Processes Need a Full Review

Large % of non-competitive procurement



C – Current Procurement Policies and Processes Need a Full Review

Issues of Blanket Contracts

Lacks a
comprehensive
Blanket Contract
policy

- Many existing blanket contracts have extremely low dollar value or low spending
- Some purchases under Blanket Contracts are more expensive than purchasing the same product through individual POs

Needs to expand
existing Blanket
Contracts

- Issued individual POs to 229 vendors totalling \$174 million (Jan 2015 to June 2016) – all outside of any price agreement. Each vendor supplied TTC over \$50,000 in goods/services
- TTC could potentially save \$0.5 to \$2.5 million per year from volume discount

A Summary of Potential Cost Savings

Initiatives	Potential Annual Savings (in millions)	
	Low	High
Expanding Alternate Sourcing for Parts	\$2.5	\$6.5
Pursuing Aftermarket Parts Warranty	\$4.0	\$6.0
Expanding Blanket Contracts	\$0.5	\$2.5
Subtotal	\$7.0	\$15.0

Plus

Improving Retrieval and Tracking of Cores	\$1 to \$1.5 M based on an assessment of 8 types of cores; total savings from over 2,000 existing core codes could potentially be in the millions
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Thank you