

## UNDERSTANDING RISKS ASSOCIATED WITH INFORMATION SYSTEMS

### IT Risk Register mapped to IT 2015-2018 outcomes and work plan

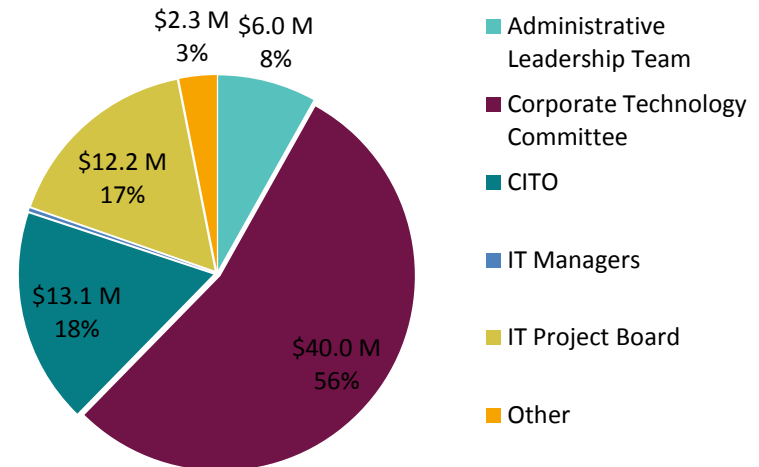
RISK	OUTCOMES				2015 IT WORK PLAN
	Enabling municipal IT infrastructure	Information as a strategic asset	Empowering technology decision-making	Agile workforce	
1	✓	✓			✓
2		✓			✓
3	✓				✓
4	✓		✓		✓
5	✓		✓		✓
6	✓		✓		✓
7	✓				✓
8	✓				✓
9	✓		✓		✓
10	✓				✓
11	✓		✓		✓
12	✓				✓
13				✓	✓
14			✓		✓
15	✓			✓	✓
16					✓
17	✓				✓
18				✓	

### IT client satisfaction

Client satisfaction	Result	Trend
Quality of the products and services	●	➡
Evaluation of 19 services offered by IT	●	⬆
Timeliness of products and services	▲	⬆
Opportunity to discuss service standards and costs	■	⬆

Source: 2014 IT Client Satisfaction Survey

### Total business technology projects approved by authorizing body



Includes projects that are in-flight, not started and on hold.

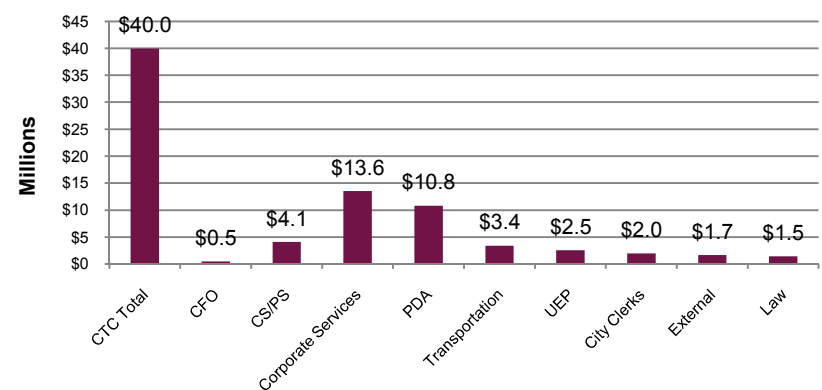
ALT approved >\$ 5 million:

1. PTWEB – Web-based property tax system

(Total cost included changes to interfacing business systems)

Source: IT Project Management Office

### CTC approved technology projects by department



Includes projects that are in-flight, not started and on hold.

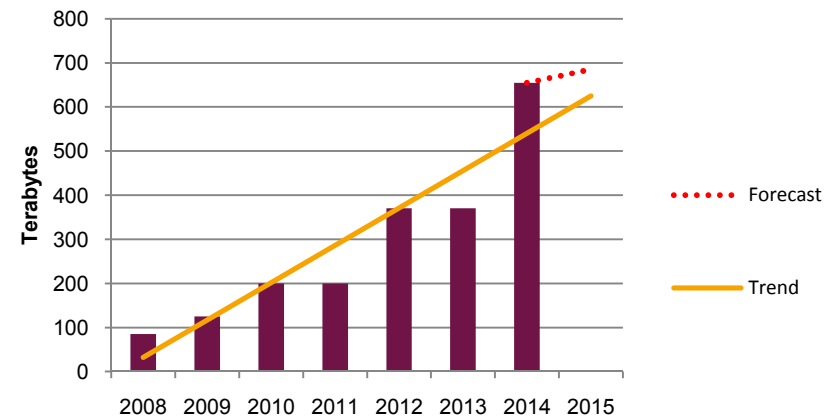
Source: IT Project Management Office

## UNDERSTANDING RISKS ASSOCIATED WITH INFORMATION SYSTEMS

### Working mobile devices and web site traffic

WIRELESS DEVICES	2014	▲ From Prev Yr
Smart phones (BB/iPhone)	4,076	(+726)
Cell phones	812	(-138)
Air cards and modems	5099	(+2,249)
Mike radios	4,580	(-20)
CITRIX	2014	▲ From Prev Yr
Concurrent licenses	2,000	(+1500)
WEBSITE	2014	▲ From Prev Yr
2014 visits to all sites	25 million	(no change)
2014 visits to calgary.ca	15.1 million	(-1.3 million)
2014 mobile visits to calgary.ca	2.9 million	(+.4 million)
2014 visits to myCity	4 million	

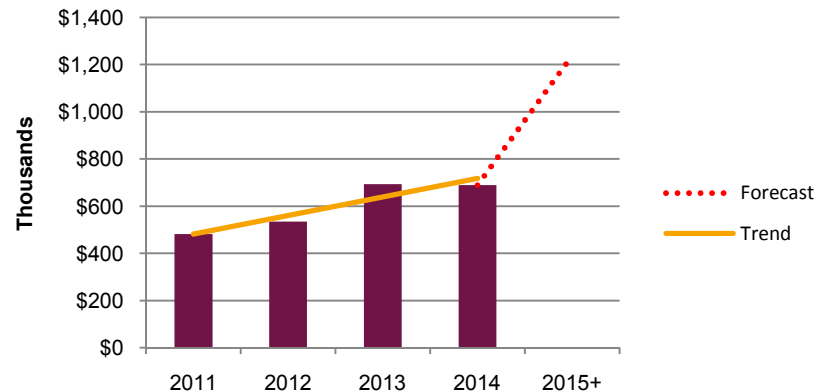
### Peak network volumes



Since 2008, data volumes have grown over 500 per cent.

Source: IT Network Traffic Report

### Wide Area Network costs provided by third-party providers



City business functions and staff using more IT.

Examples:

- Data intensive business systems
- Security camera image transmission

Source: IT Network Management

### Servers, phones, databases and storage

INFRASTRUCTURE	2014	▲ From Prev Yr
Servers	1865	(+709)*
Analog landline phones	2413	(-25)*
Digital and VOIP phones	8964	(+692)*
Database instances	517	(+42)*
Peta bytes – disk storage	1	-Includes production, test and development -.5 of a petabyte is used by test and development
Library data: The U.S. <a href="#">Library of Congress</a> Web Capture team claims that as of March 2014 <sup>[update]</sup> "the Library has collected about 525 terabytes of web archive data" and that it adds about 5 terabytes per month**		
Fibre Optics	467 kms of cable 160 sites	(+17 KM)* cable (+10)* sites
2014 Total network traffic volume	120 Peta-bytes	
Music: One peta-byte of average <a href="#">MP3</a> -encoded songs (for mobile, roughly one megabyte per minute), would require 2,000 years to play. <sup>[21]</sup> **		