ROADS Zero-Based Review (ZBR) Final Implementation Update

January 22, 2019

ROADS ZBR Final Implementation Update

Background

In November 2015, the Transportation and Transit committee received a report for information regarding the Roads Update Report on the Zero-Based Review (TT2015-0792). It highlighted successful gains in all five service areas covered in the ZBR:

Service Area	Description
1 Streetlight Maintenance	The purchasing strategy put into place for asset replacement resulted in a substantial cost savings estimate of approximately $1.0 million compared to previous years.
2 Pavement Rehabilitation	The average daily production increased by 15%, or 200 tonnes per day compared to 2012. These gains equaled a savings of approximately $1.5 million. A related strategy resulted in a reduction of $556,000 in fleet maintenance costs.
3 Pavement Marking	The program reduced their total consumption of glass beads (in the paint) by 25% compared to the previous year, saving approximately $45,000 annually.
4 Sign Manufacturing	Adopted administrative changes to better support customer service, and reduced the production time on certain core products by up to 50%.
5 Gravel Crushing	The implementation of performance monitoring and forecasting strategies resulted in an 11% reduction in the costs per tonne. This equaled a savings of $409,000 based on 2015 production numbers.

The consultant's ZBR report estimated a target of $1.4 to $1.9 million in annual savings by 2017. Roads actual productivity gains and cost savings were **$3.5 million** by the end of 2015.

(Cont'd) Background

More than just cost savings, the zero-based review also provided opportunities to encourage and support innovation within teams, which led to additional customer service improvements:

- Streetlight repairs – response times were cut in half, improving to 22 days, well below the 30 day target
- Excavation permits – created an online application program for customers to use 24/7. This reduced errors and delays from using fax, email and phone to support more than 8000 requests each year.

Teams also became more efficient in delivering several of their core services, including spring street sweeping and seasonal road marking.

Response times for street light repair were cut in **HALF**

ENABLED electronic applications for all excavation permits

Pre-sweeping **REMOVED** 50% more debris for Spring Clean-up

MORE road lines and stencils were painted than ever before (500 km)

Progress Update

The Roads ZBR is now complete, and was very successful. By the end of 2018, the gains in efficiency and productivity have allowed Roads to reinvest approximately **$11.4 million** back into their service delivery, compared to the 2012 baseline numbers.

Roads	Efficiency Type	2015	2016	2017	2018
New annual savings					
Pavement Marking	Productivity Gains	$45,000	$45,000	$45,000	$45,000
Gravel Crushing	Cost Savings	$300,000	$300,000	$300,000	$300,000
SUBTOTAL		**$345,000**	**$345,000**	**$345,000**	**$345,000**
Variable annual savings					
Street Light Maintenance	Cost Avoidance (Capital)	$1,000,000	$600,000	$1,900,000	$3,200,000
Gravel Crushing	Cost Savings	$109,000	$225,000	$0	$150,000
Pavement Rehabilitation	Productivity Gains	$2,056,000	$560,000	$219,000	$0
SUBTOTAL		**$3,165,000**	**$1,385,000**	**$2,119,000**	**$3,350,000**
Total ZBR Savings (4 years)					**$11,399,000**

One service that will not see full implementation of the administration recommendations is the Sign Shop. Strategic investments in equipment replacement and customer service did result in production time being reduced by 30-50% for some core products. However, the feasibility of expanding commercial services to other municipalities or districts has diminished, as market conditions have changed with the development of two new sign manufacturing operations in the province, including the City of Edmonton.

Going Forward

The ZBR process has led to sustainable change in how Roads continues to focus on cost-effective delivery of services, including actively encouraging staff to think about ways to make improvements.

An example of this is their **Innovation Journal** program. Held twice a year, teams participate in brainstorming sessions to talk about their processes and the way they work, use technology, and provide service – to see if there are ways to work more efficiently. At the end of 2017, the Journal had 104 entries, and 61 of the suggestions have been implemented to date.

Below are some of the additional projects and initiatives that have been implemented or are underway since the Roads ZBR was completed in 2015.

A Culture of Continuous Improvement	
Employee Engagement	**Innovation Journal** **Let's Talk Sessions** – sharing the results of employees surveys and help groups create action plans to improve their work environment **Women in Transportation program** – developing a supportive, learning environment for women in Transportation
Process Review	**Concrete Control Centre** – analysis of all concrete operations resulting in better coordination **311 Service Request Process mapping** – improved efficiency and quality of response
Customer Service	**New On-line Over-dimensional Booking System** **New Annual Temporary Sign Permit** **Customer Service Analysis Tool** – created for employees to analyze their customers journey or interaction with Roads processes to achieve their goals
Cost Savings	**New Installation option for iSlows** (residential speed signage) – Use of wooden poles reduced costs to $1,000 versus $5,000 for streetlight mounting. **Signal Cabinet Maintenance Route Optimization** – using ArcGIS to map inspection routes resulting in 425 less hours of driving time. **Steel Ramps for Sink Holes** – temporary structure that helps with emergency sinkholes which reduces detour set-ups and cost
Performance Measures	**311 Roads Dashboard** – provides weekly information about # of SRs received, # closed and remaining, Ward information about SR complaints and addresses - provides employees with information on trends and hotspots to help plan work