

# ALBERTA MUNICIPAL BENCHMARKING INITIATIVE



**Solid Waste Service Area**

# WHAT IS AMBI?

## 7 Alberta municipalities

- Grant from Alberta Municipal Affairs
- Collaboration to build a framework, develop benchmark definitions and allow comparison
- Develop an ongoing benchmarking process of 10 service areas
- A benchmark is an defined point of reference against which things can be measured and compared between municipalities

# WHY BENCHMARKING

*A benchmark is an established point of reference against which things can be measured and compared*

- Helps to tell the municipal “performance story”
- Sound business practice
- Share knowledge and best practices
- Identifies opportunities for change
- Encourages continuous improvement
- Demonstrates transparency and value for money
- Supports results based accountability

# TWO DIMENSIONS

## Efficiency

- a measure of productivity: quantity
- often expressed in cost per unit

## Effectiveness

- a measure of value or benefit of service: quality
- often expressed as percentage or rate

# SOLID WASTE

- Third of 10 service areas to be benchmarked
- Collaboration to build a framework and allow comparison

## **Solid Waste services is:**

- Collection of solid waste recyclables and garbage from residences
- Processing to separate recyclables
- Marketing of recyclables
- Disposal of end-of-life garbage

# SOLID WASTE

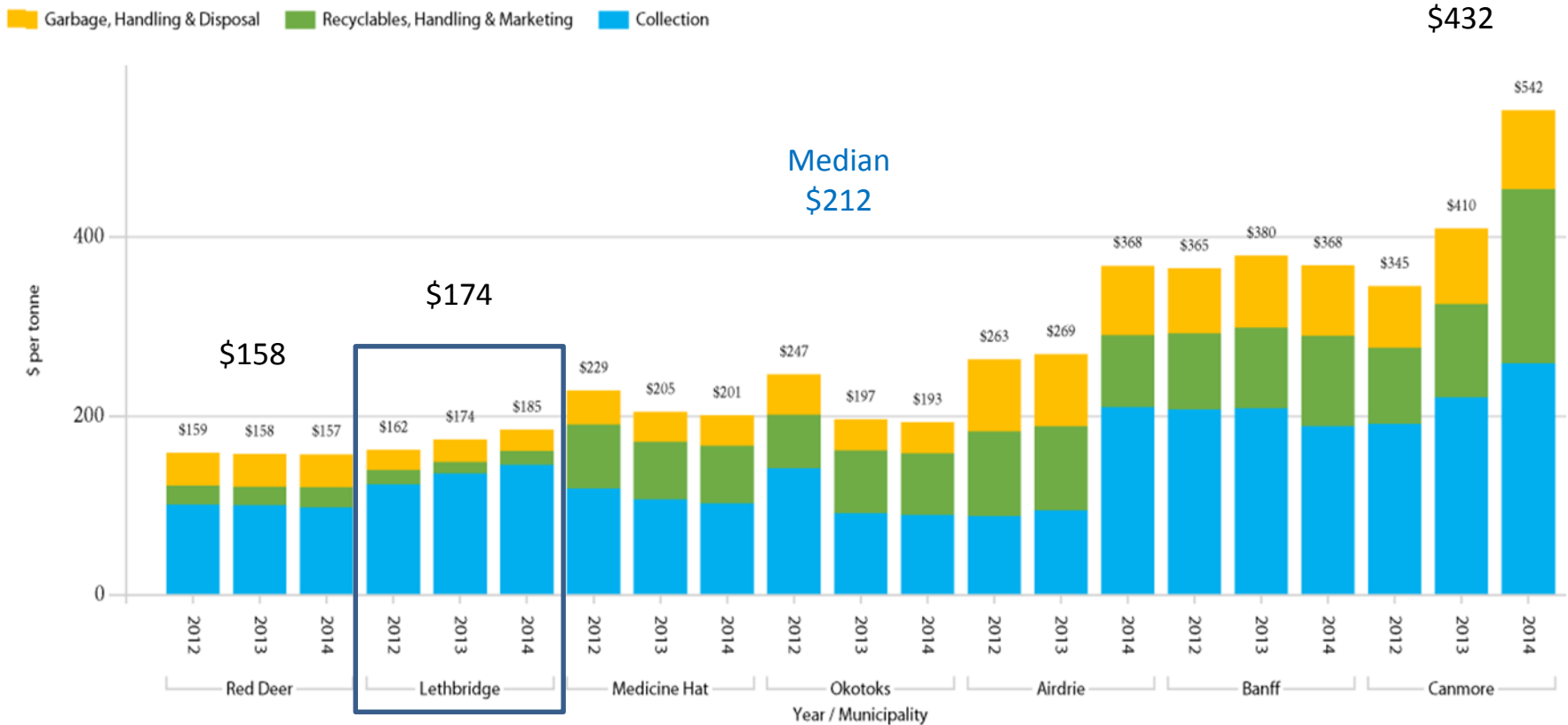
## Influencing factors (as of 2014)

Municipality	Municipal Waste Limits	Collection System Automated	Collection System Manual	Contract All Solid Waste Services	Collection from Rear Lanes (%)	Tipping Fees (\$/tonne)	Curbside Garbage (tonnes)	Curbside Recyclables (tonnes)
Airdrie	Y		Y	Y	20%	\$113	7,976	3,606
Banff		Y			0%	\$35	0	0
Canmore		Y			0%	\$35	0	0
Lethbridge		Y			50%	\$21	24,554	110
Medicine Hat	Y	Y			59%	\$52	13,680	3,213
Okotoks	Y	Y			28%	\$60	4,227	1,048
Red Deer	Y		Y	Y	70%	\$65	18,228	7,491

Municipality	Curbside Carts Garbage (#)	Curbside Carts Recyclables (#)	Communal Bins Garbage (#)	Communal Bins Recyclables (#)	Special Large Items (# / month)
Airdrie	0	0	0	714	0
Banff	0	0	199	96	1,080
Canmore	0	0	166	91	2
Lethbridge	29,999	0	51	0	155
Medicine Hat	22,082	11,472	514	0	0
Okotoks	10,500	9,700	0	0	0
Red Deer	0	0	476	530	0

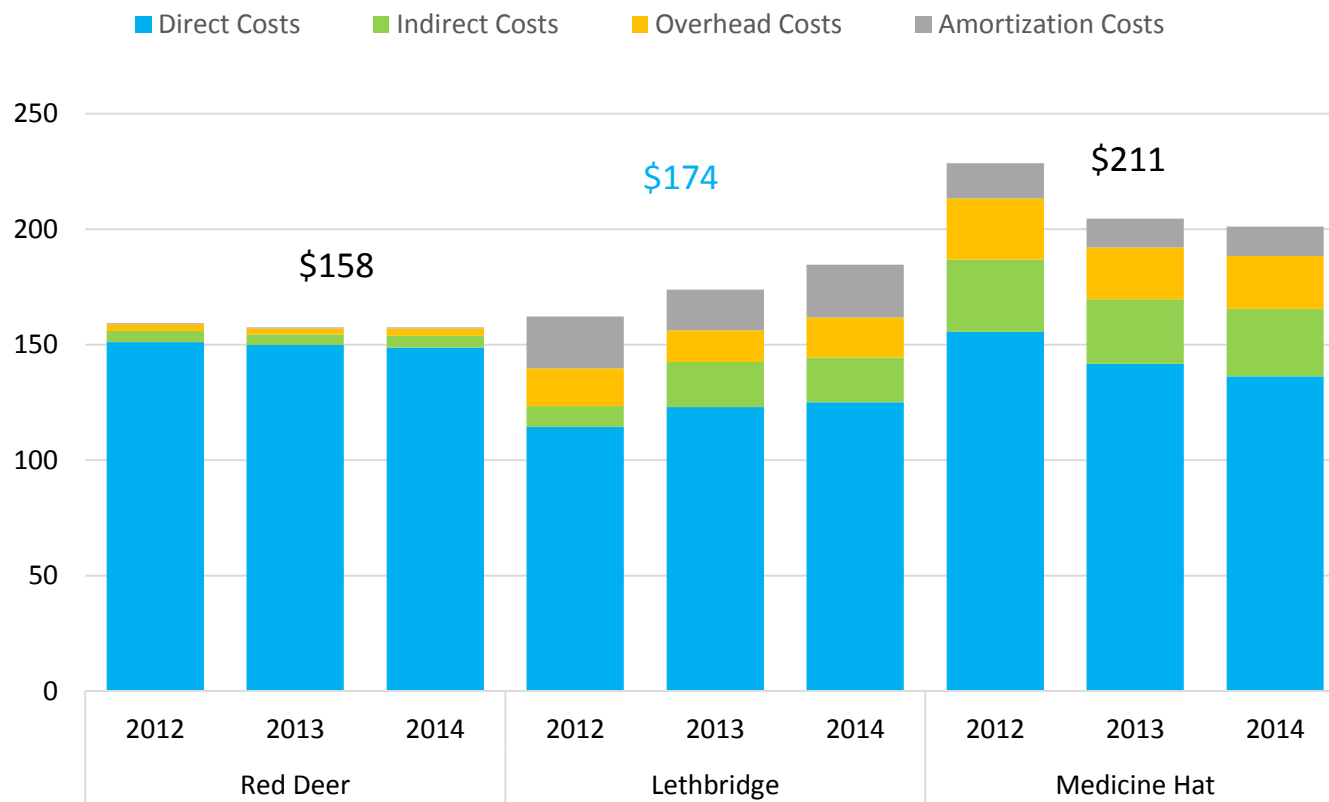
# 2.2 TOTAL SOLID WASTE COSTS

Solid Waste System Total Cost 1 (\$/tonne collected)



## 2.3 TOTAL SOLID WASTE COSTS

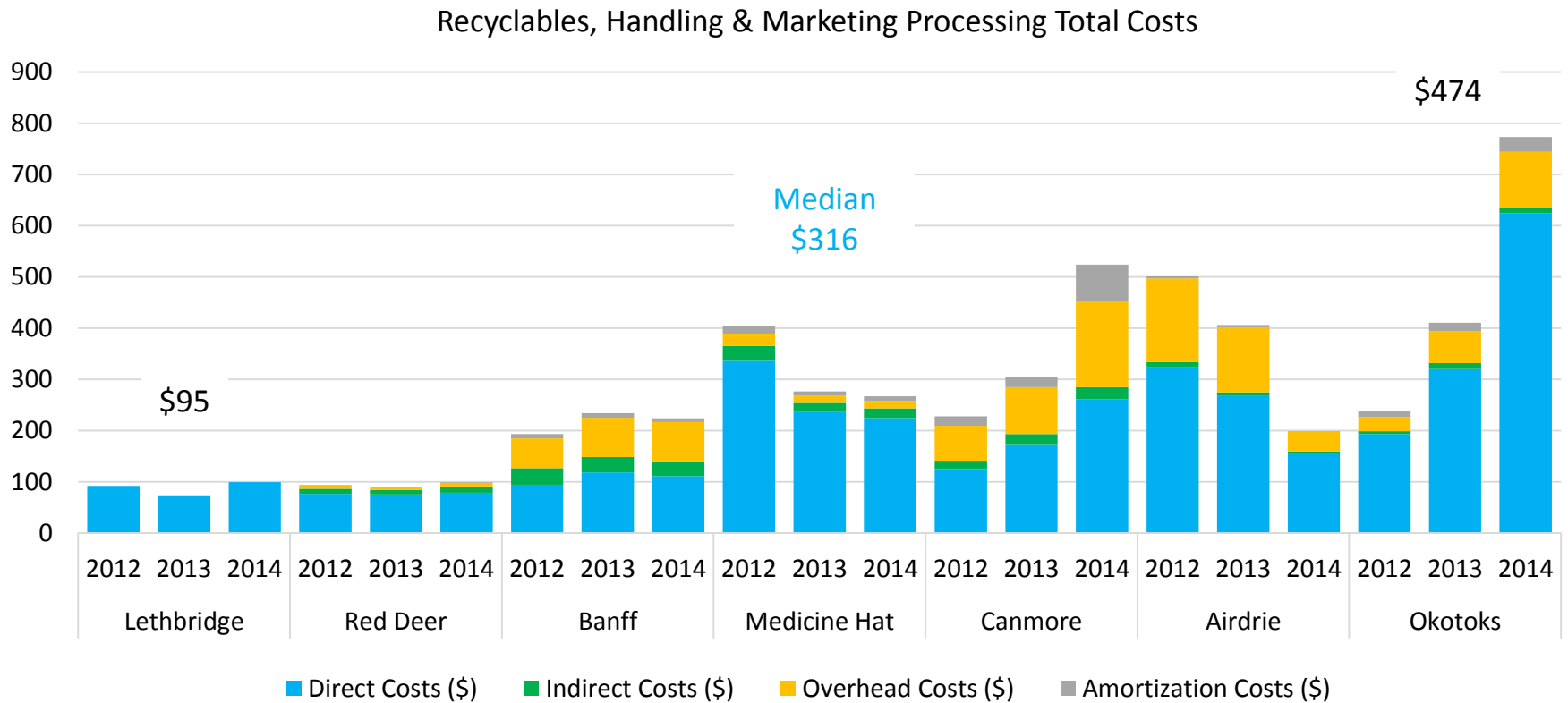
Total Solid Waste Cost (\$/tonne collected)





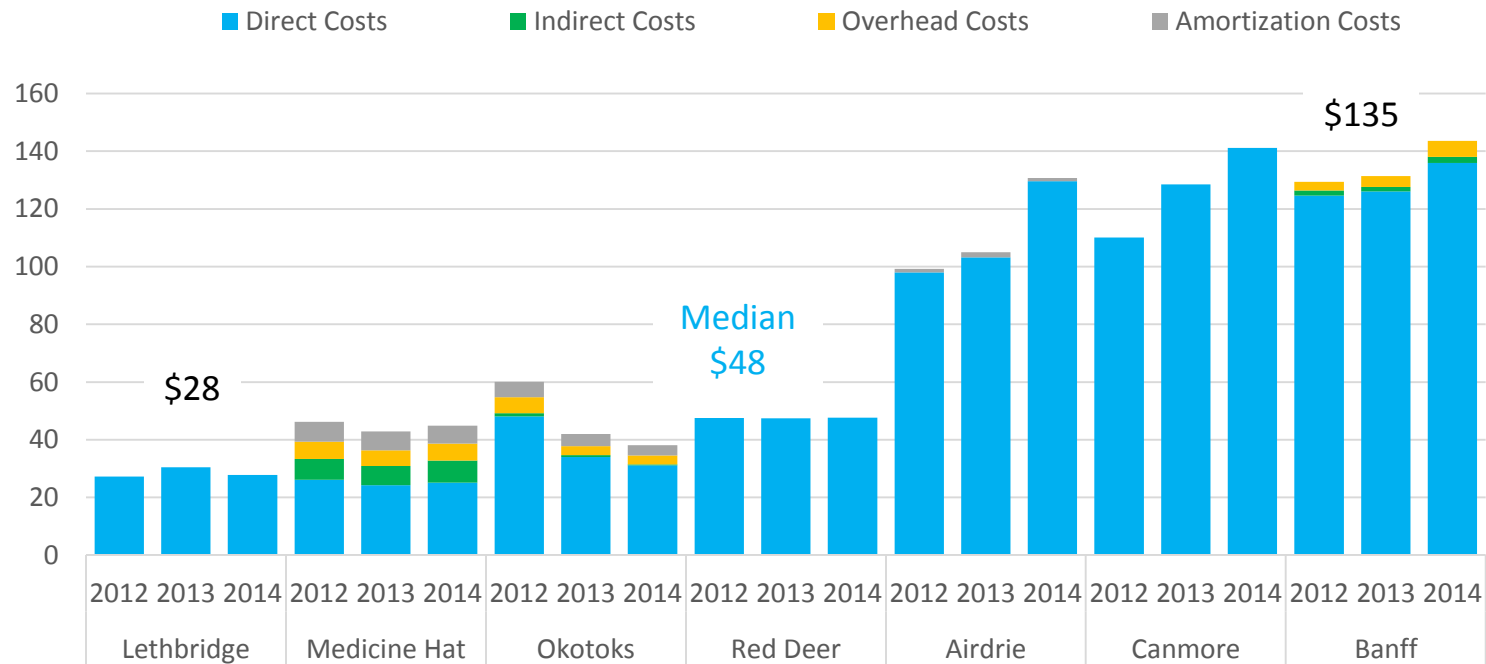
# 2.5 RECYCLABLES

## Recyclables, Handling & Marketing Processing Total Cost (\$/tonne recycled) - Efficiency



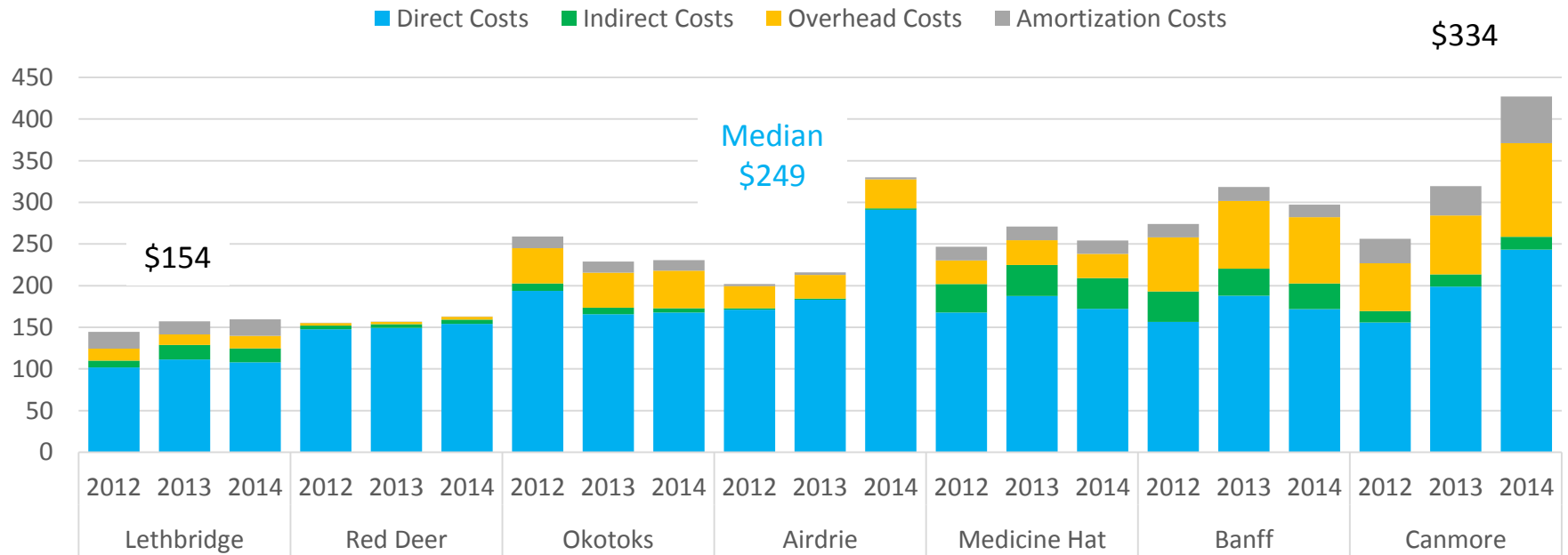
## 2.6 GARBAGE HANDLING AND DISPOSAL

### Garbage Handling and Disposal (\$/tonne collected) - Efficiency



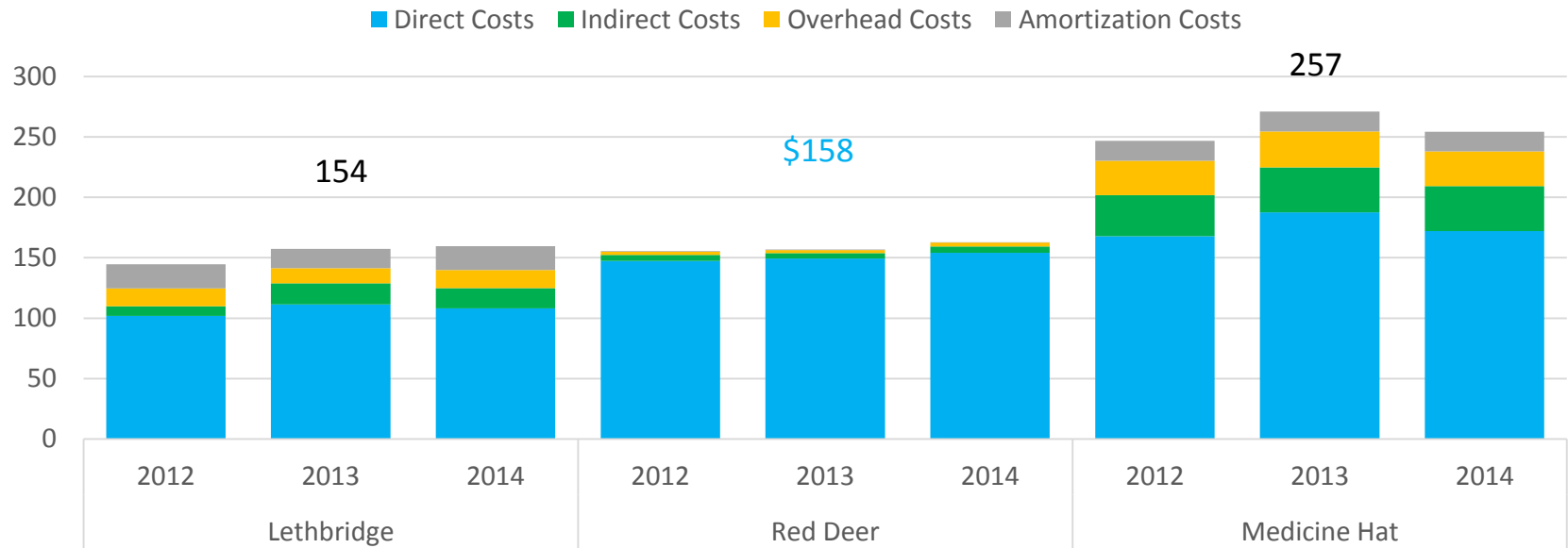
# 2.7 RESIDENTIAL SOLID WASTE TOTAL COSTS

Residential Solid Waste Total Costs (\$/dwelling unit serviced) - Efficiency



# 2.7 RESIDENTIAL SOLID WASTE TOTAL COSTS

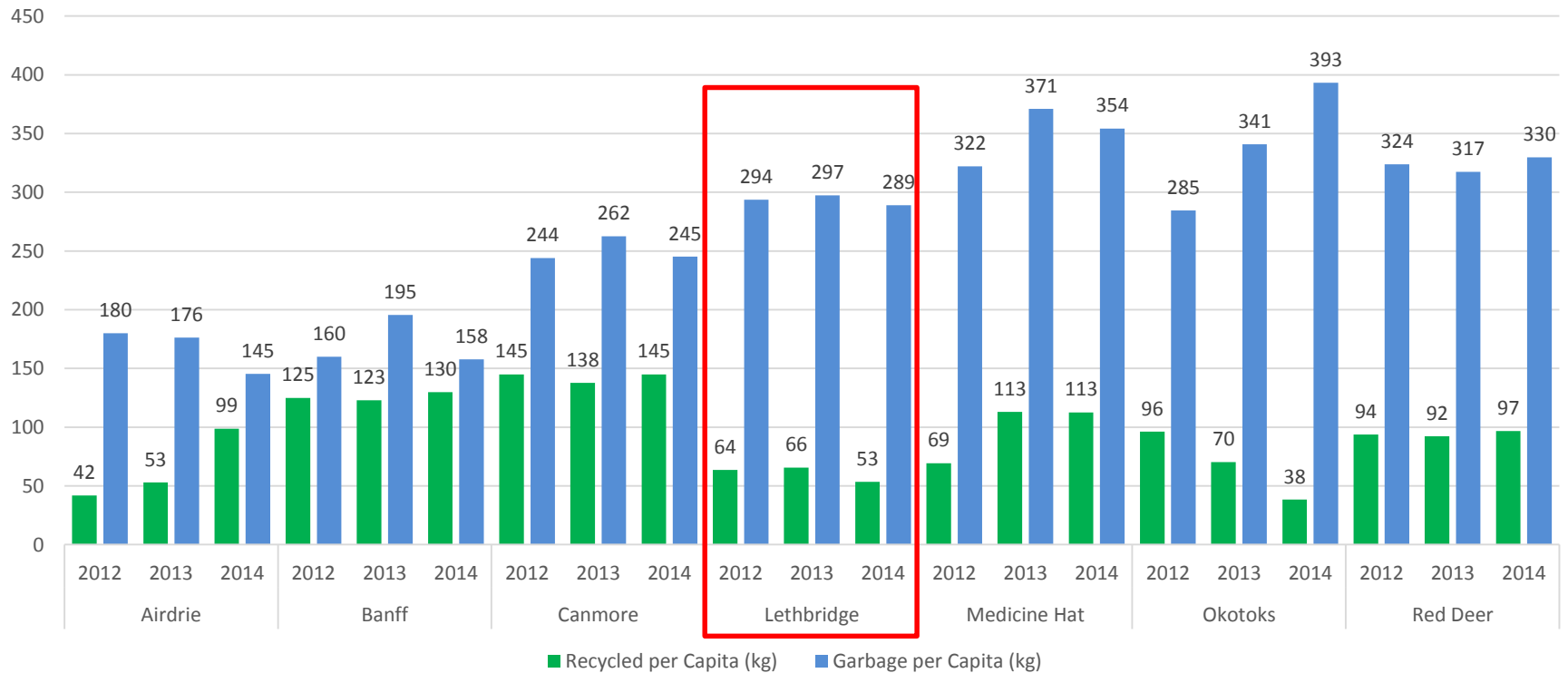
Residential Solid Waste Total Costs (\$/dwelling unit serviced) - Efficiency



# 2.15 RESIDENTIAL SOLID WASTE STATISTICS

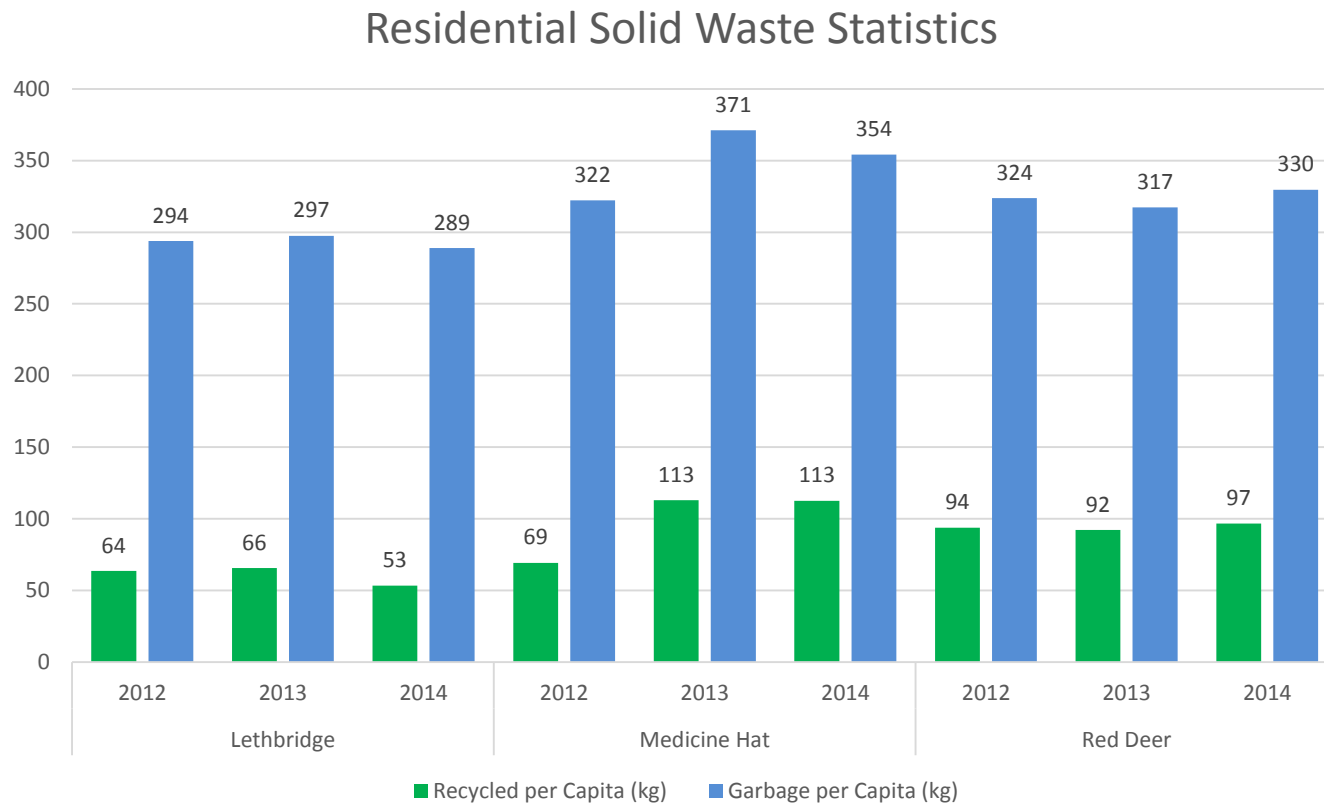
## Residential Solid Waste Statistics (kg/capita) - Effectiveness

Residential Solid Waste Statistics



# 2.15 RESIDENTIAL SOLID WASTE STATISTICS

## Residential Solid Waste Statistics (kg/capita) - Effectiveness



## Lessons learned

- Distance to landfill has the largest impact on disposal cost per tonne.
  1. Lethbridge, Medicine Hat and Red Deer have local landfill sites
  2. Others operate a transfer station and then long haul waste to landfill site
- Tipping fees vary but have a lesser effect on direct costs compared to transportation
- New handling facilities and new recycling programs increase tonnes recycled
- Municipalities have various approaches to collecting commercial solid waste. For example:
  - Red Deer collects all commercial
  - Canmore and Okotoks, no commercial
  - Lethbridge and Medicine Hat, some commercial

# SOLID WASTE SUMMARY

## LETHBRIDGE

- Lowest or below median for collection and garbage costs per tonne and per dwelling unit
- Median for total solid waste KG per capita
- Lethbridge provide additional services (Large Item Service, Electronics, Christmas Tree Collection, etc)



# NEXT STEPS

- Complete other service area benchmark reports
- Review practices and seek efficiencies where possible