



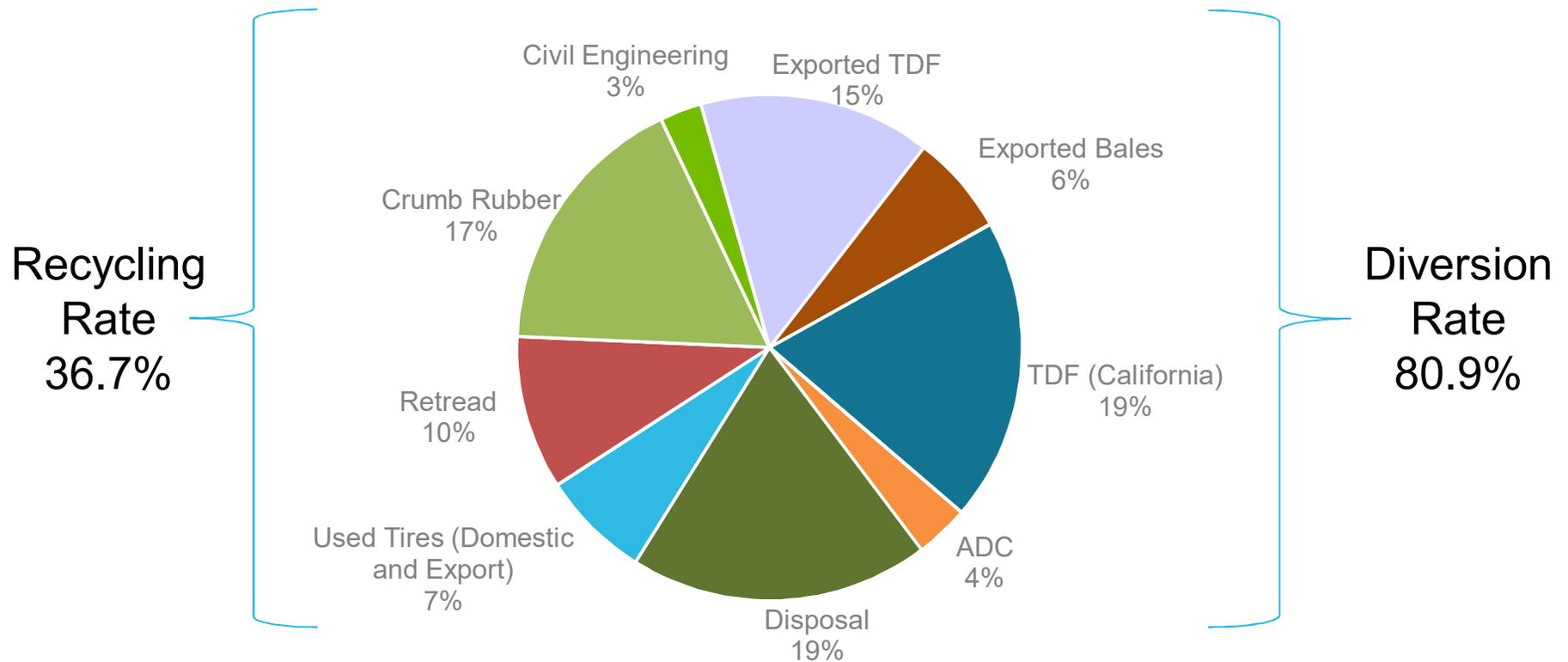
2015 California Waste Tire Market Analysis

Ed Boisson, Boisson Consulting
May 16, 2016



Overview: 2015 Draft Results

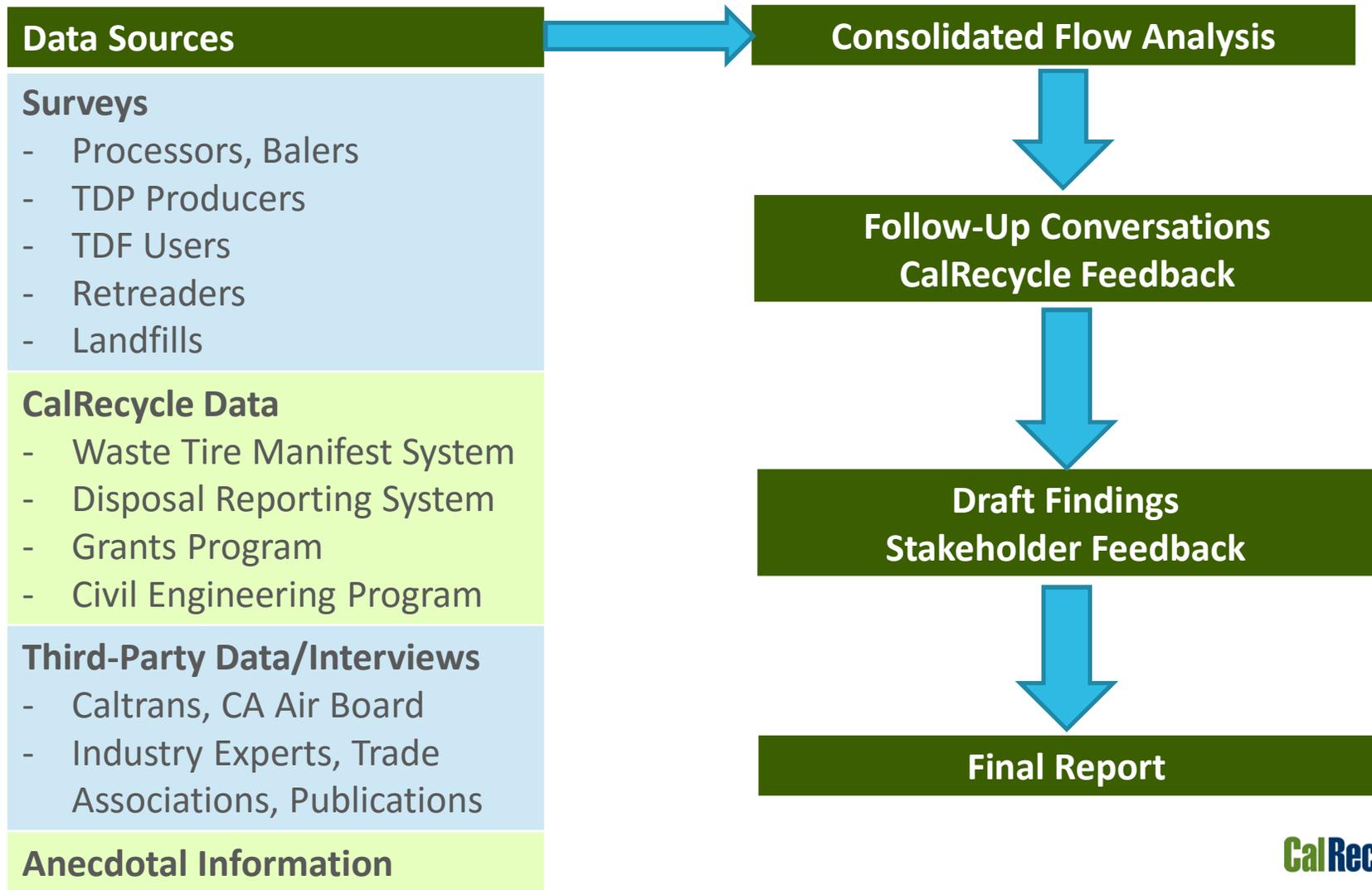
Total = 44.3 Million PTE



Agenda

- **Methodology**
- **Key Findings and Trends**
- **Implications for Tire Market Development**

Methodology

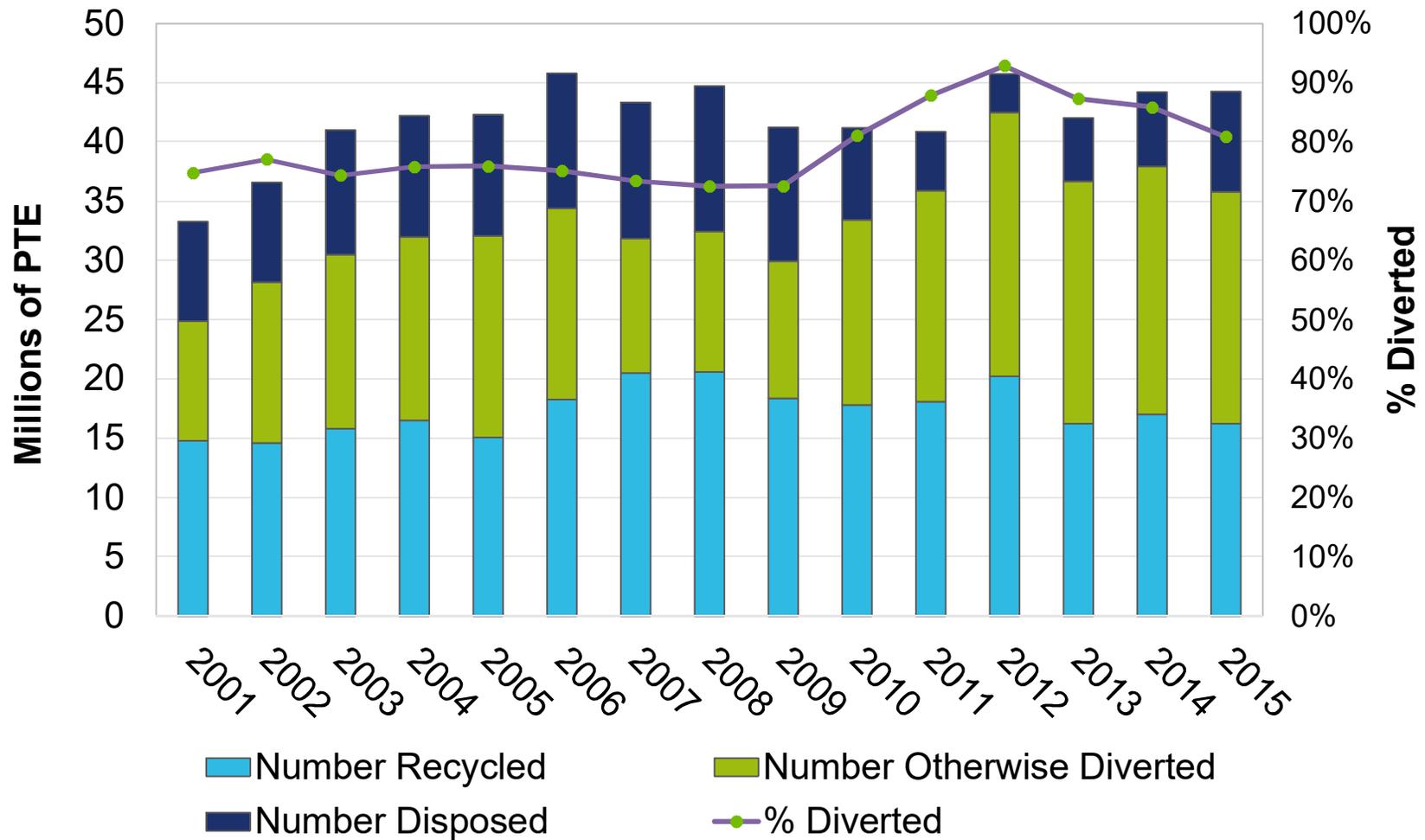


Interpreting Results

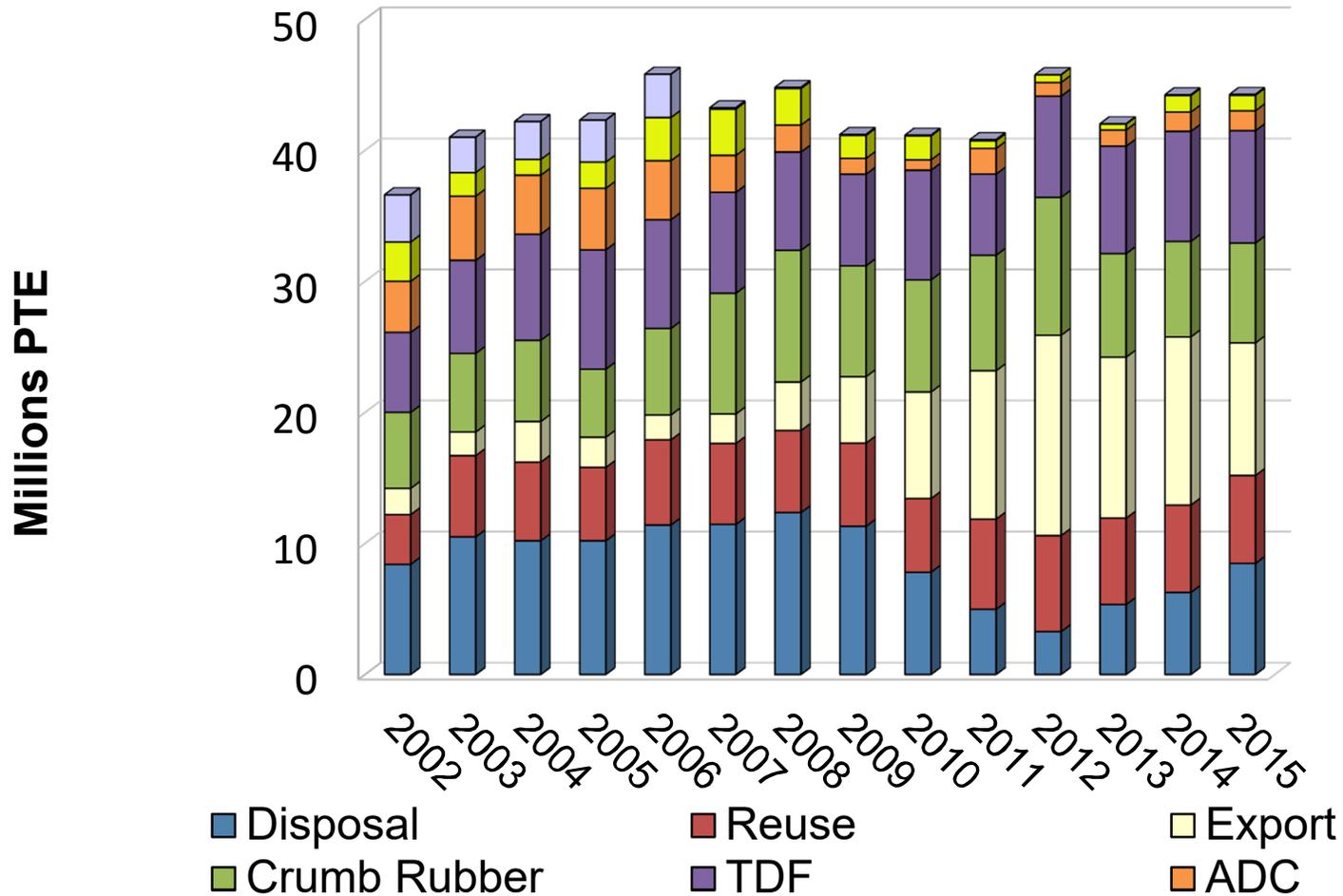
- Focus on CA Tires Flowing to Each Market Segment
- Not Counted in Flow Estimates (But Researched Separately):
 - Out-of-State Waste Tires Flowing to CA Processors
 - Out-of-State TDPs and TDM Sold/Installed in California
 - Retreader Buffings
- Generally About +/- 10% Accuracy
- Not Counted Against Calculated Recycling Rate:
 - Any Disposed Fiber or Wire
 - Disposed TDPs at End-of-Life

Today's Draft Results are Subject to Change
Feedback Welcome!

Historical Diversion Trend

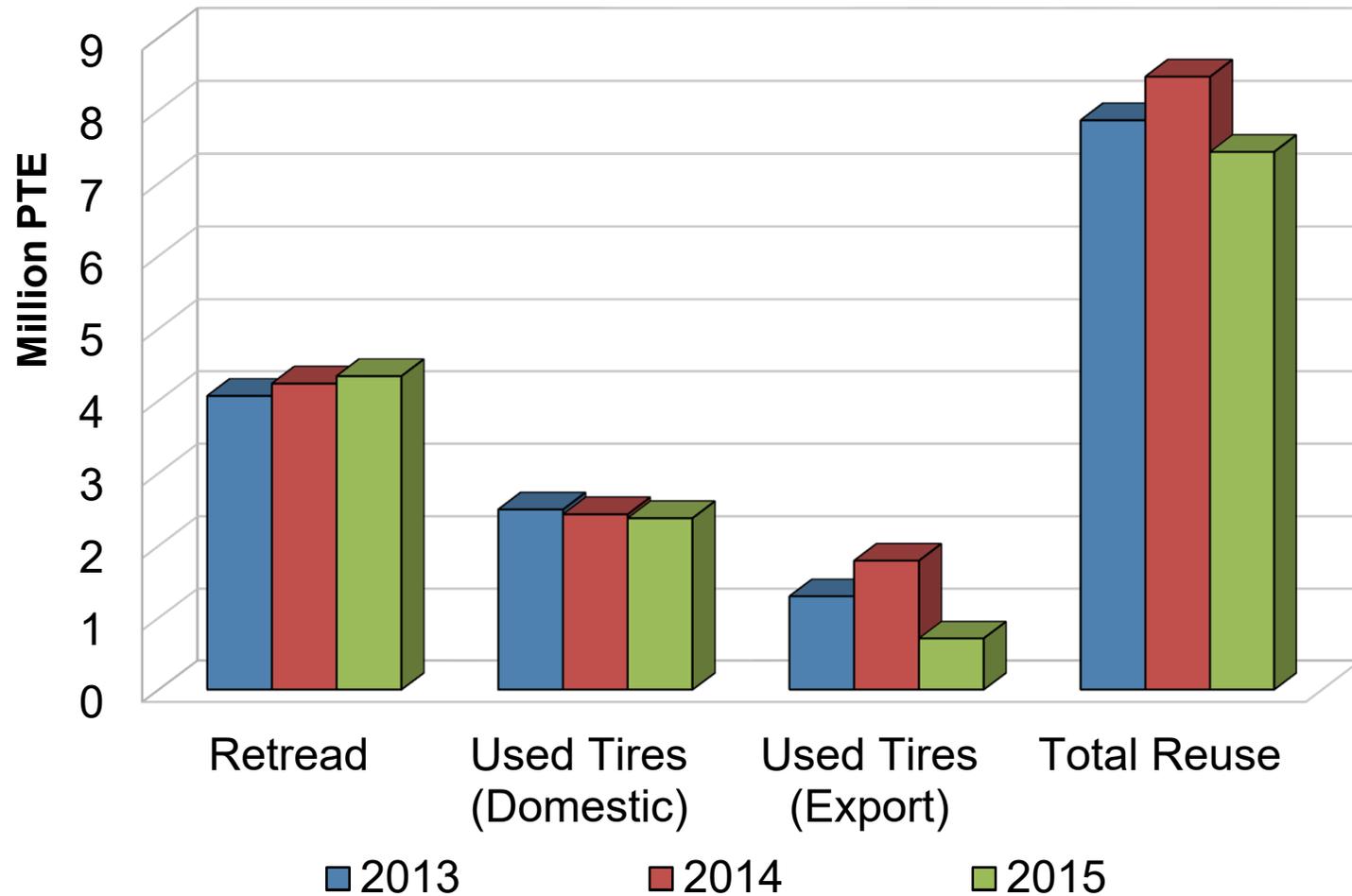


Historical Market Trend



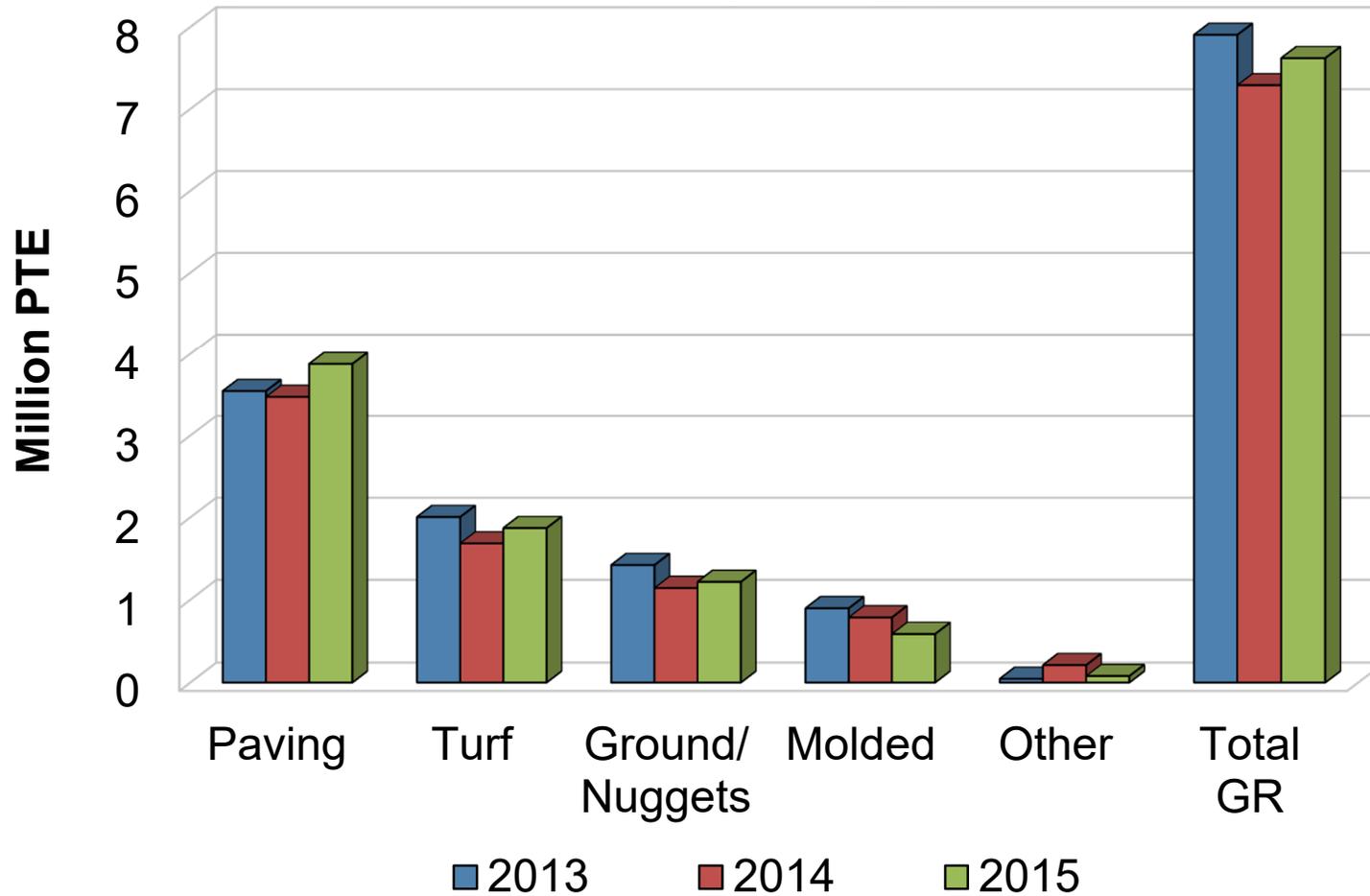
Reuse Steady

Apparent Decline Due to Methodology Change



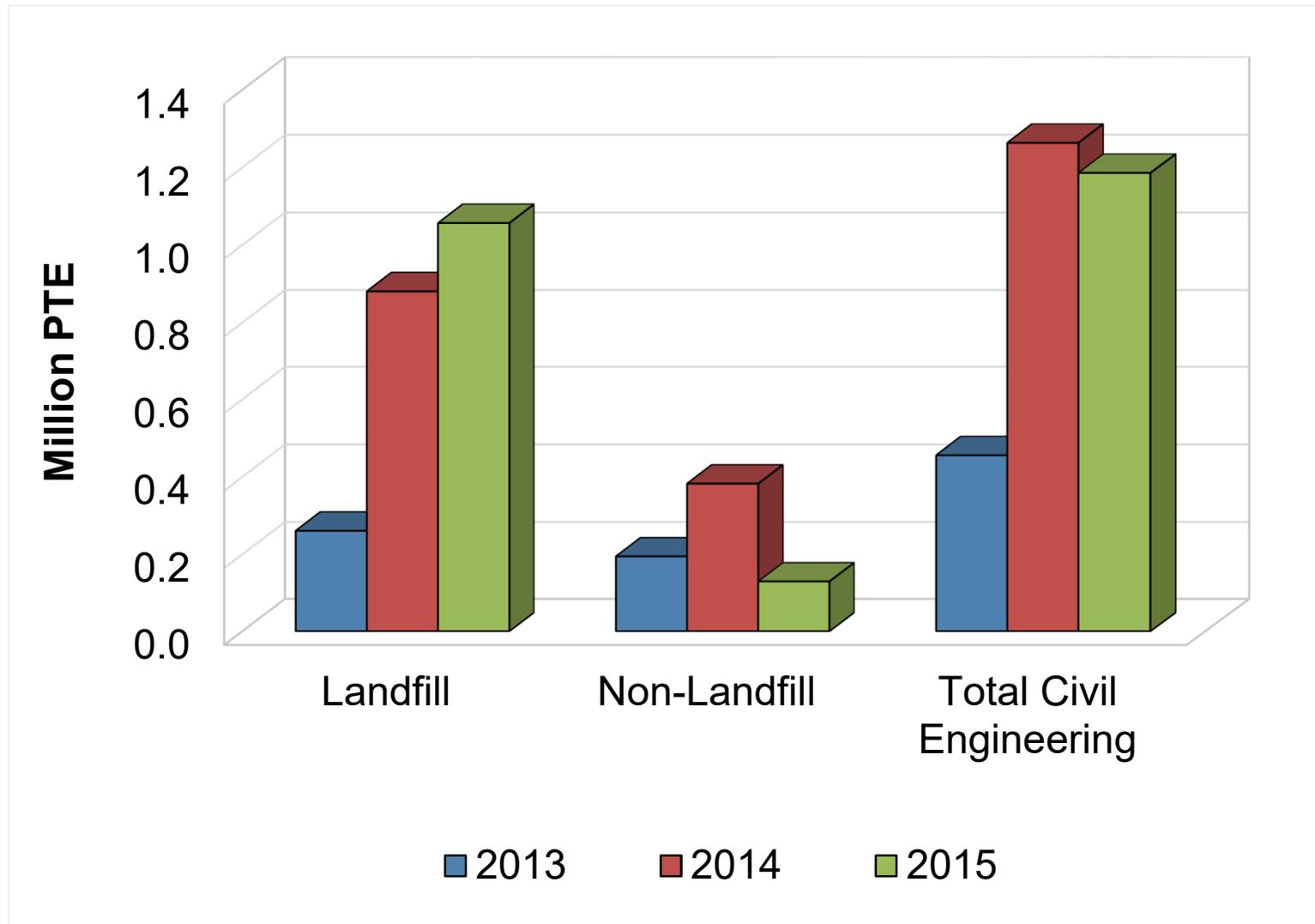
Crumb Rubber Up 5% in 2015

Expect Modest Growth in 2016



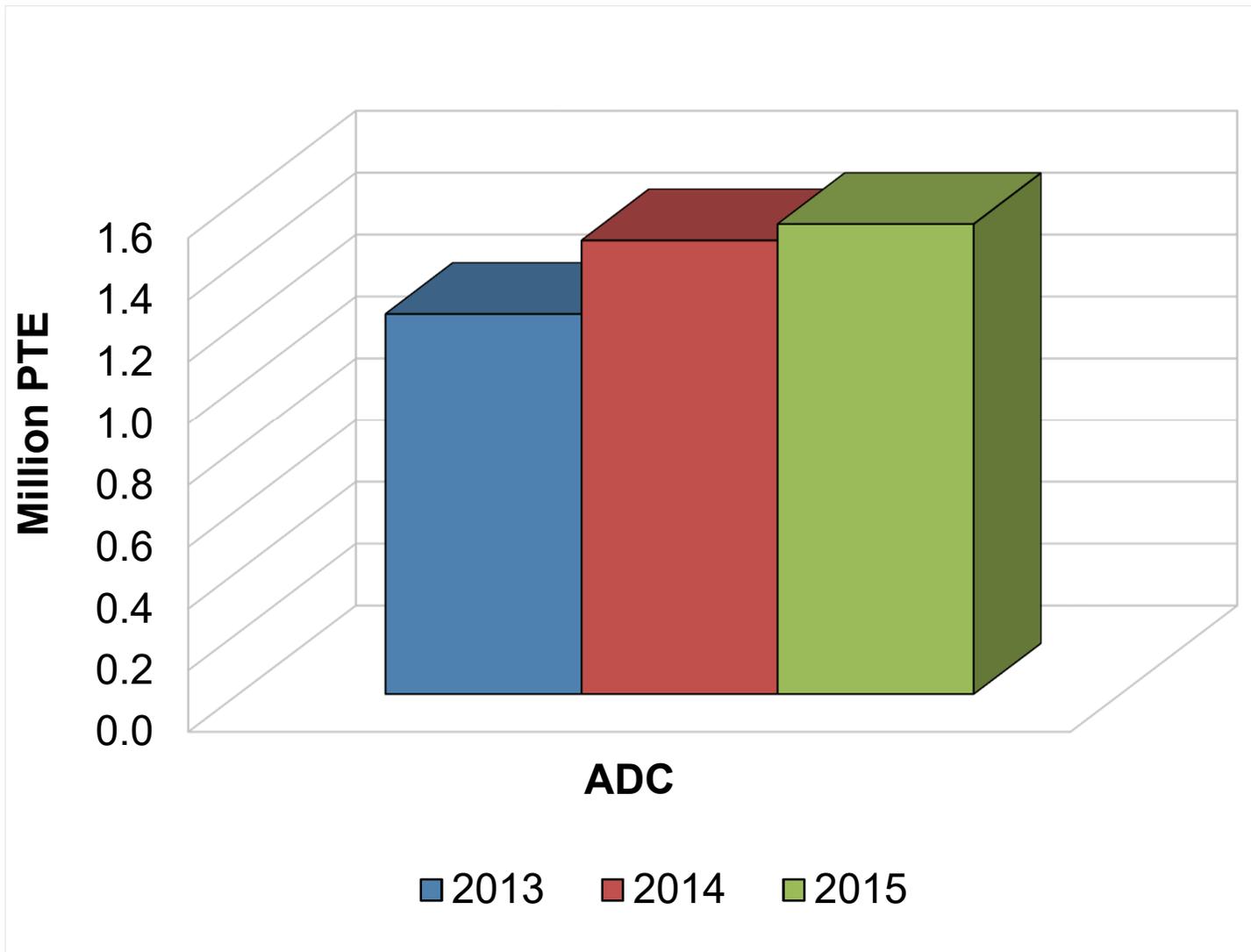
Civil Engineering Down 6% in 2015

Increase Expected in 2016+



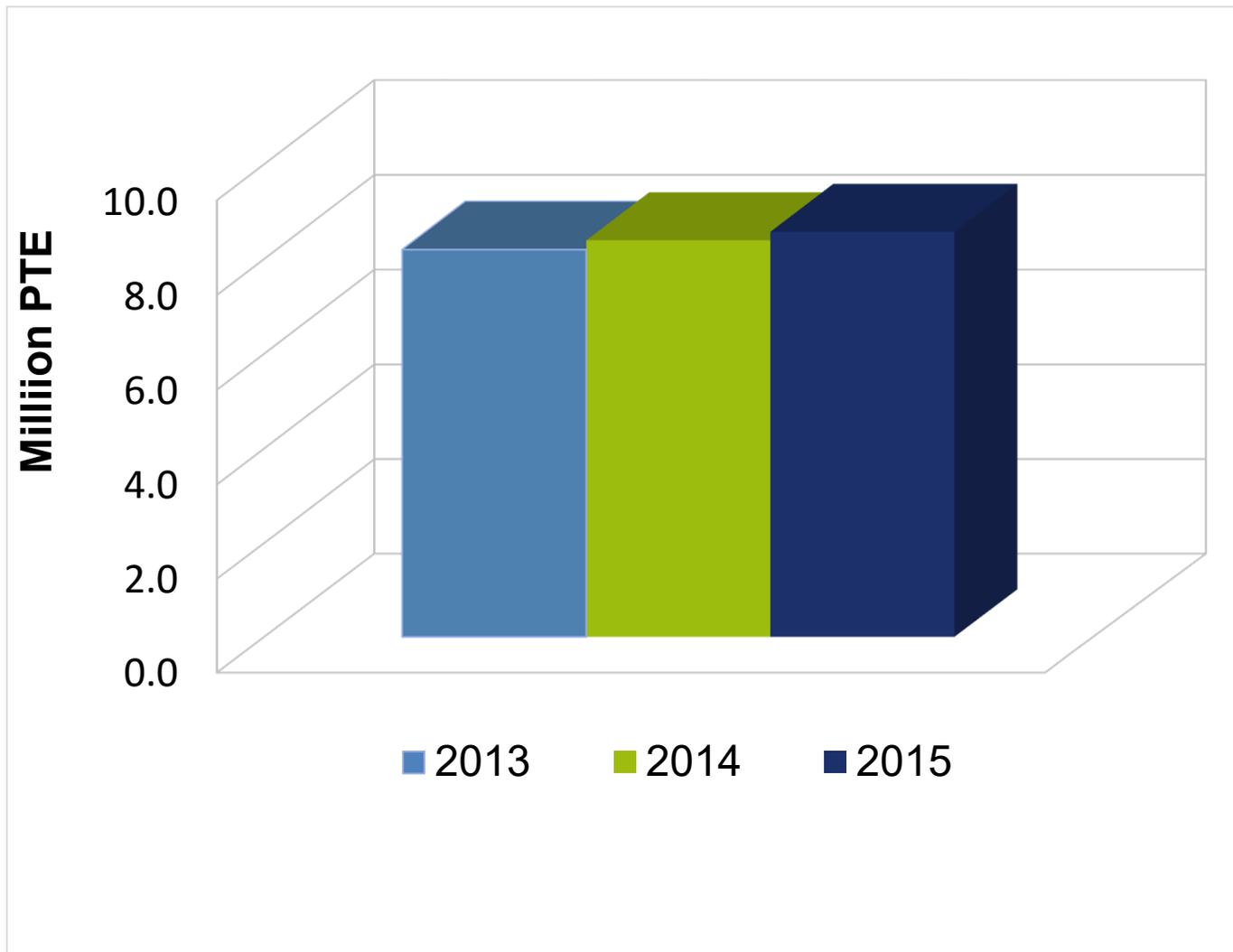
ADC Up 4% in 2015

Expect Flat in 2016



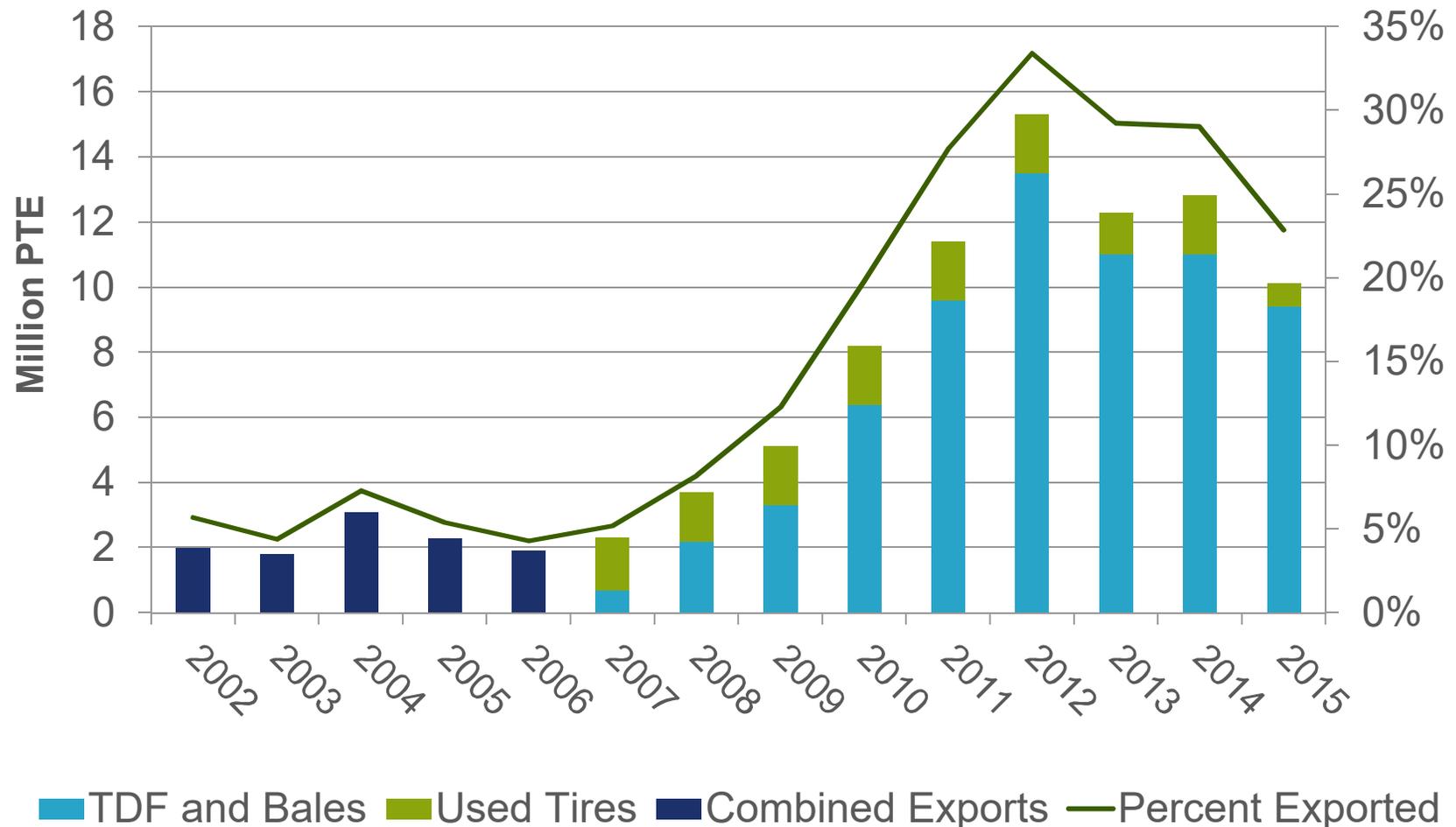
TDF Up 2% in 2015

Expect Flat in 2016

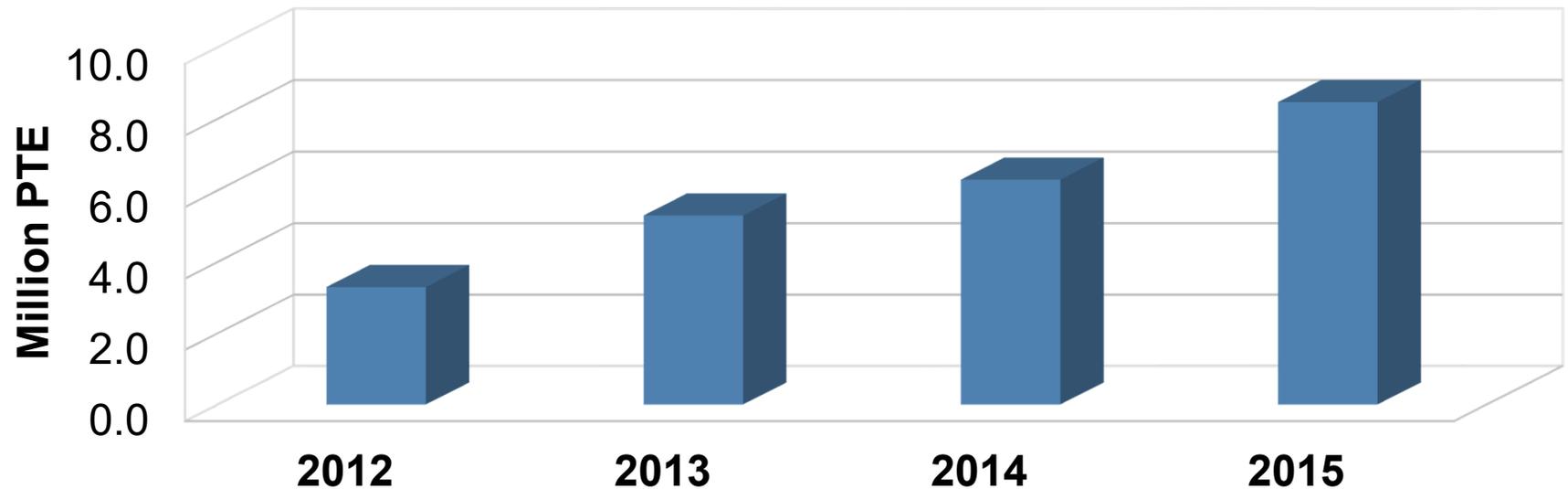


TDF Export Down 11% in 2015 Expect Flat in 2016

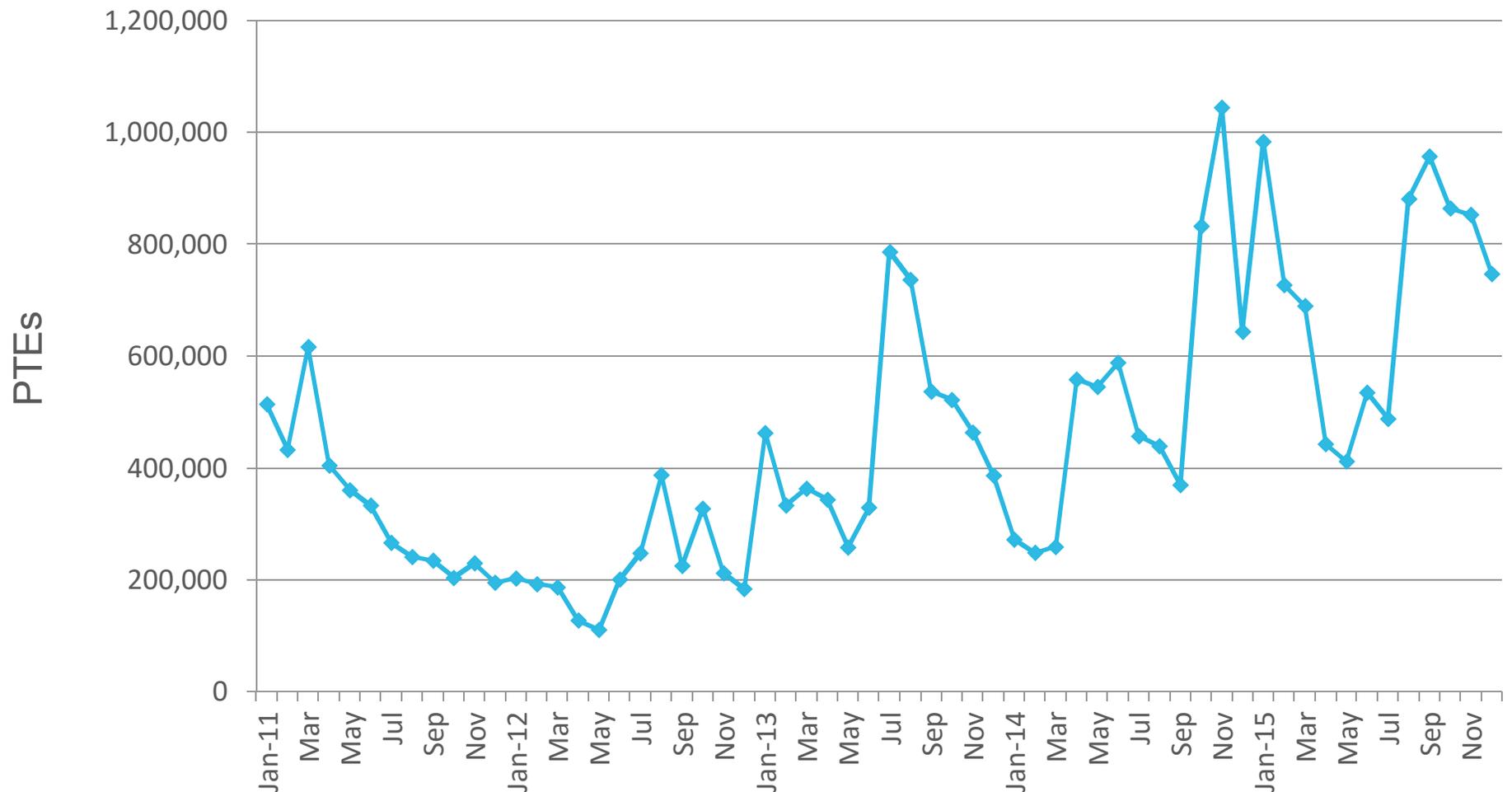
Bales Down 22% Decline May Continue in 2016



Disposal Up 35% in 2015 Uncertain in 2016



Tire Deliveries to Top 6 Tire Disposal Sites Monthly



Source: CalRecycle WTMS System



Import and Export Synopsis 2015

Category	Imports	Exports
Waste Tires	>1M PTE From Western States	25,135 Tons Bales Mainly to Asia
Culled Used Tires	>>1M Used Tires From Other States Go To/Thru CA	871,000 Units to Mexico ¹ + “Informal” Shipments; 166,933 to Other Nations ¹
Processed TDF	None – But >1M PTE to CA TDF via CA Processors	65,614 Tons Mainly to Korea and Japan
Casings	>5,000 Tons from Other States, Countries	Some to Other States, Countries
Retreads	NA	Some to other States; 108,687 Units to Other Countries ¹
Crumb/ Ground	Some From Other States, Countries	Some to Other States, Countries
Buffings	>1-2M Pounds from Other States	Some to Other States, Countries
TDPs	From Other States/ Countries	Some to Other States, Countries

1. U.S. Census Bureau

Market Development Implications

Must Double Recycling to Reach 75% (17M Additional PTE)

- **Reuse:** Thriving Independently, But Concerns Over Chinese Imports; Little Room for Growth
- **Crumb Rubber:** Need New/Expanded Markets
 - **Paving:** Potential for 6M+ More PTE w/Caltrans Policy
 - **Turf:** Some Growth Possible Despite Negative Media Focus, New Studies Critical; 50% Growth = 1M More PTE
 - **Ground/Nuggets:** Some Growth Possible; 100% Growth = 1.2M More PTE
 - **Molded:** Diversifying But Low-Volume; Very Optimistic Long-Term Growth Potential Probably <4M PTE

Market Development Implications

Must Double Recycling to Reach 75% (17M More PTE)

- **Civil Engineering:** Need Increased, More Consistent Demand
 - A Sustained 5-fold Increase Over the 5-Year Running Average Per Year = 4.2M More PTE
- **Above Hypothetical Expansion = 16.4M PTE**
- **Key Questions:**
 - How to Expand Existing and Establish New Markets?
 - Who Are the TDP Customers? What Do They Need?
 - How Can State Policies and Programs Best Foster Industry Innovation and Investment?



Feedback Questions & Answers

Prediction:

Continued Success and Challenges
A Thriving, Environmentally Beneficial Tire Recycling
Industry

Please Comment on This Draft Analysis

Send feedback **by May 31** to:

Ed Boisson, ed@boissonconsulting.com; 415-499-0919; or
Sally French, Sally.French@CalRecycle.ca.gov; (916) 341-6432

Final Report Expected In July

