

# Construction Cost Analysis - CIP Projects

## Presentation to the Bond Oversight Committee

July 16, 2014



# Agenda

- ❖ Purpose
- ❖ Recent Construction Portfolio
- ❖ Industry Data Trends
- ❖ Threats and Opportunities



# Purpose

This presentation uses City historic contract awards, industry data, financial forecasts to provide observations and identify future threats and opportunities about Capital Improvement Program (CIP) project costs.



# Data Sources

- Cost data is derived from Contract Management Department awards (FY09-FY13).
- Cost data only includes competitively bid projects (does not include alternative delivery method awards).
- CIP historical program and projections are taken from the City CIP 5-Year Report.
- Industry data is taken from Engineering News Record (ENR) reports and indices.



# Type of Work Definitions\*

- **Transportation:** Roads, sidewalks, trails, and related structures
- **Water/Wastewater:** Water/sewer lines, plants, controls, and related work
- **Drainage:** Stormwater lines, streambank restoration, erosion control, dam repairs, and related work
- **Facilities:** Occupied city structures
- **Aviation:** Work at ABIA
- **Energy:** Work on AE facilities
- **Other:** All other work, including environmental remediation and parkland

\***NOTE:** Work is characterized by dominant project features and not source of funding.

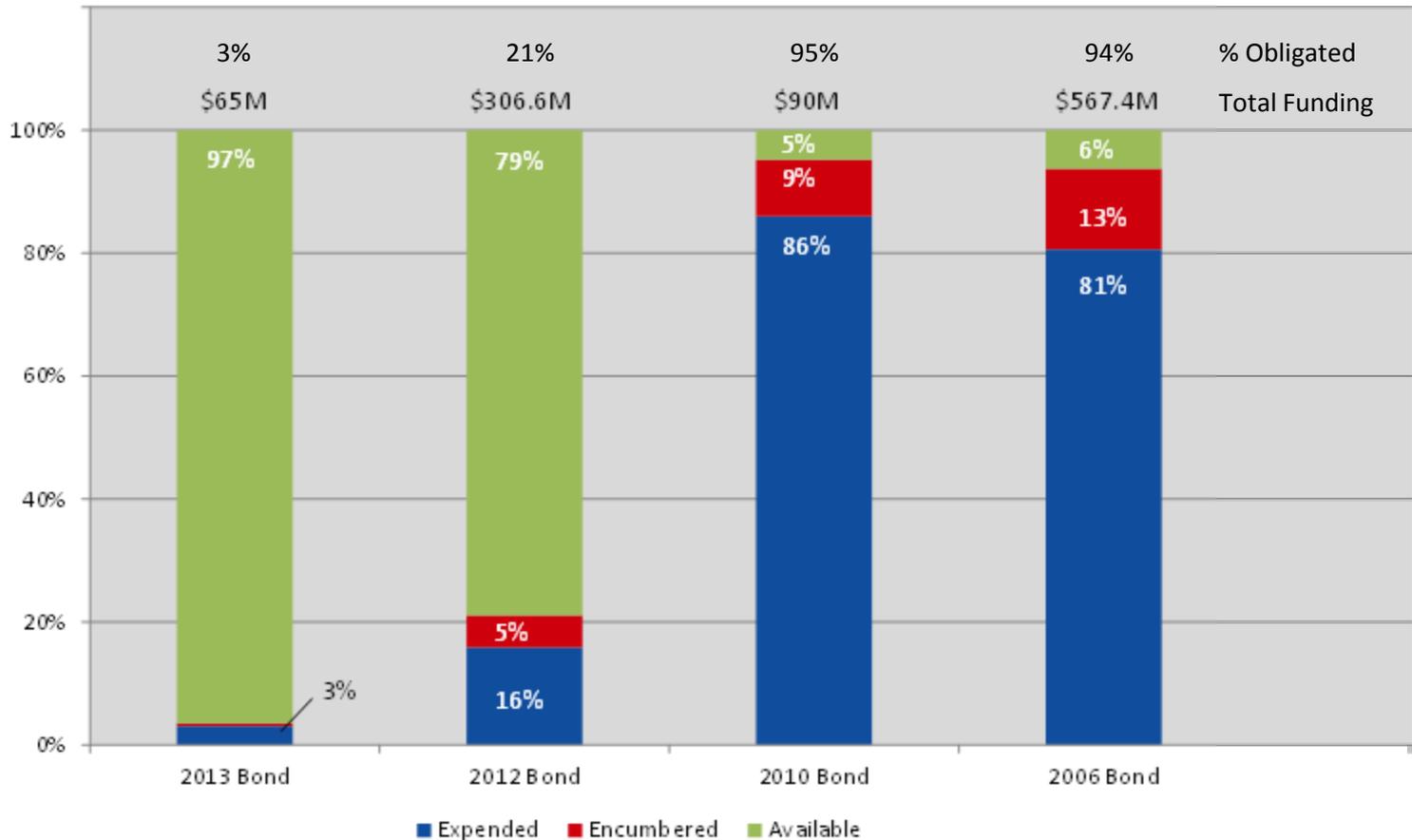


# Recent Construction Portfolio

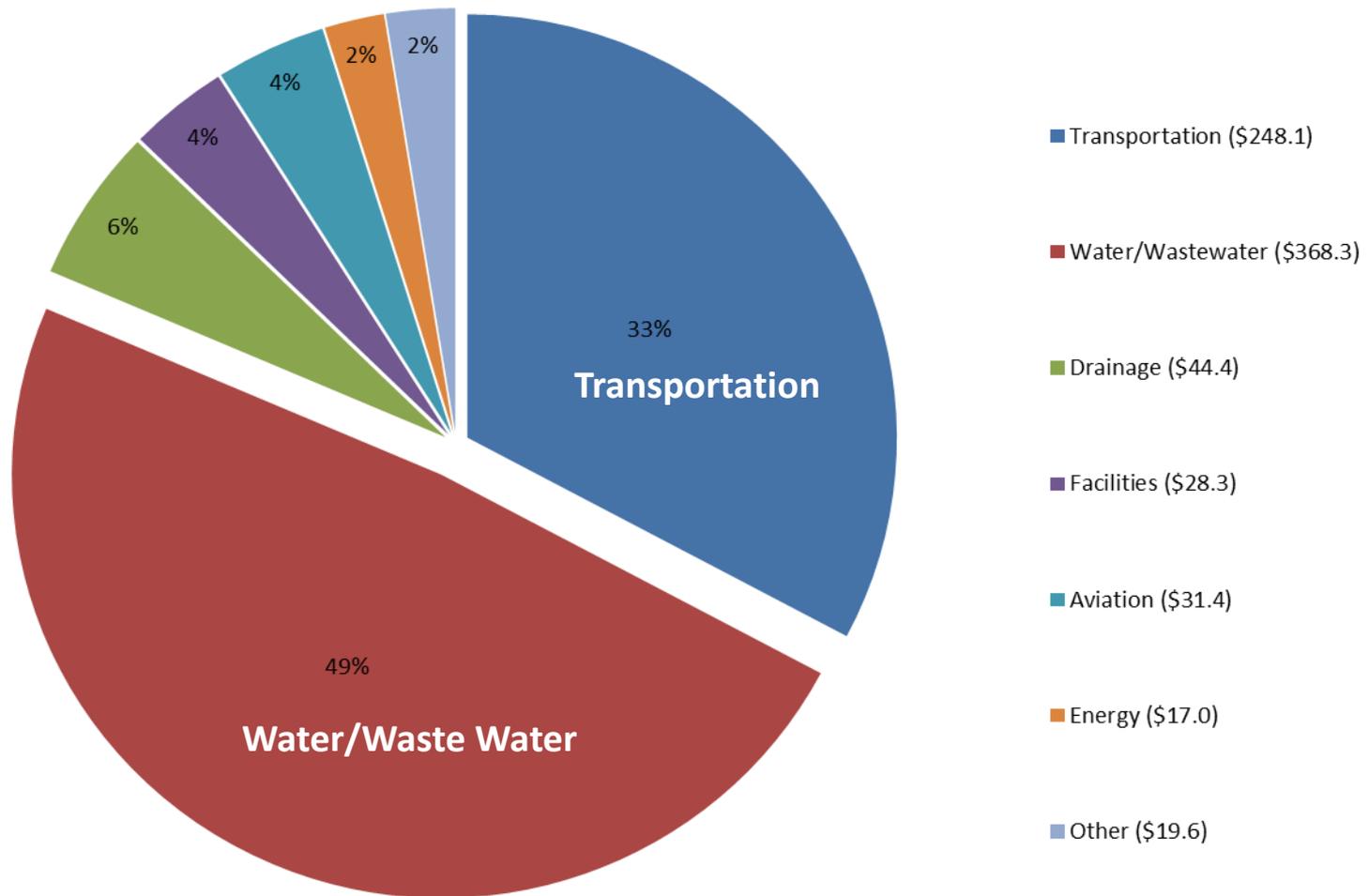


# Bond Program Status

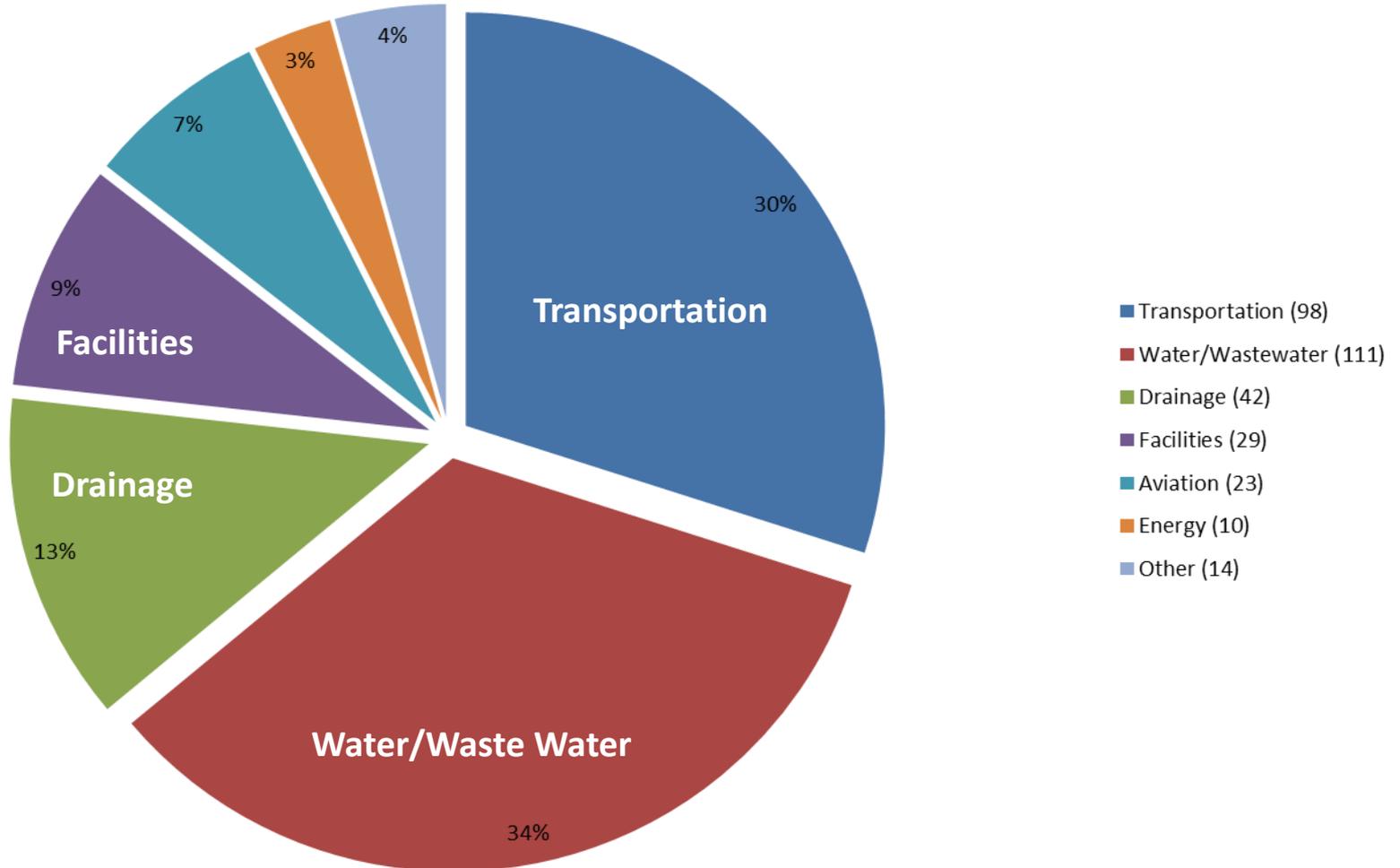
FY2014 Q3 Spending Summary



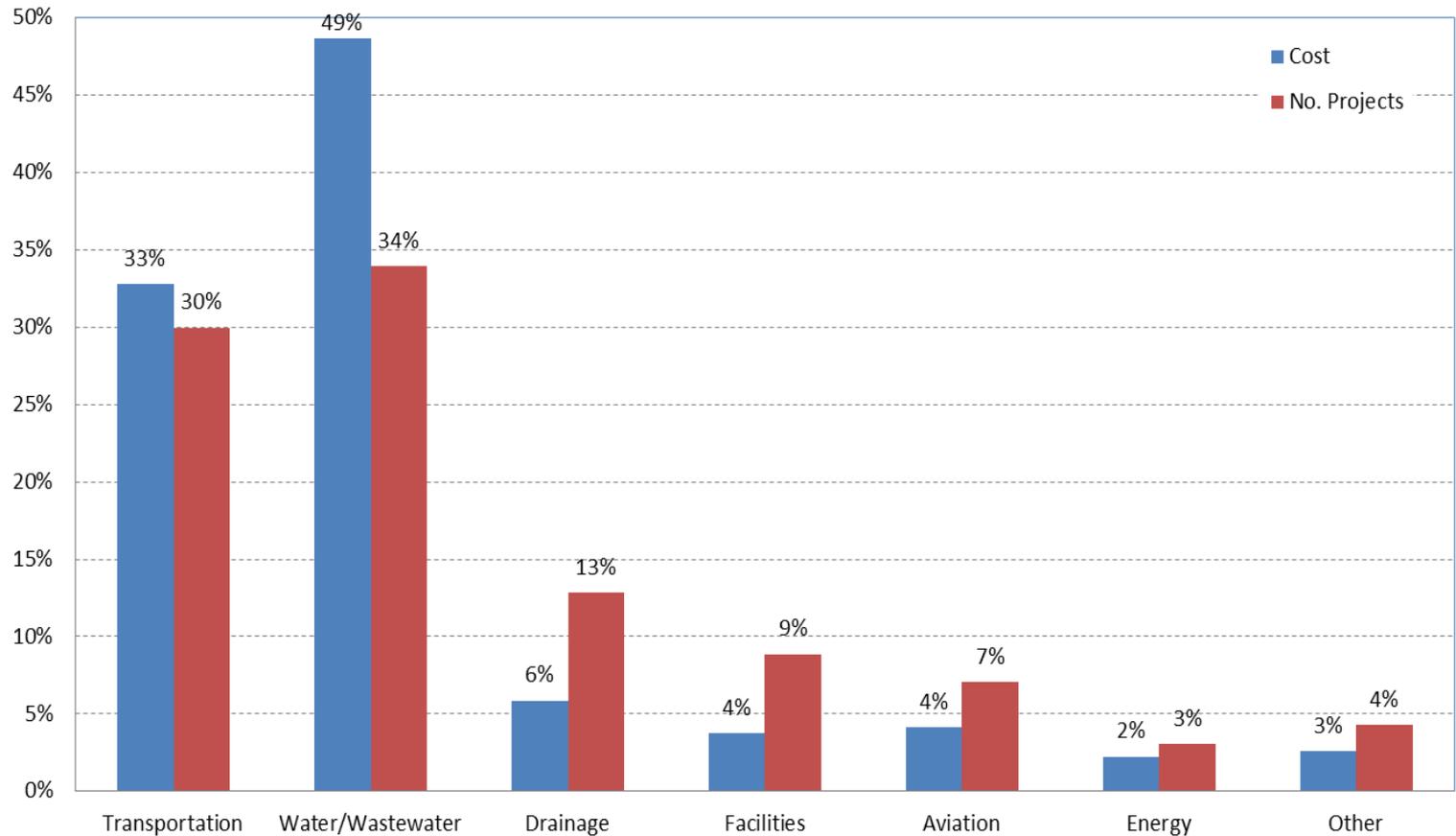
# Total Work Distribution (Cost \$M)



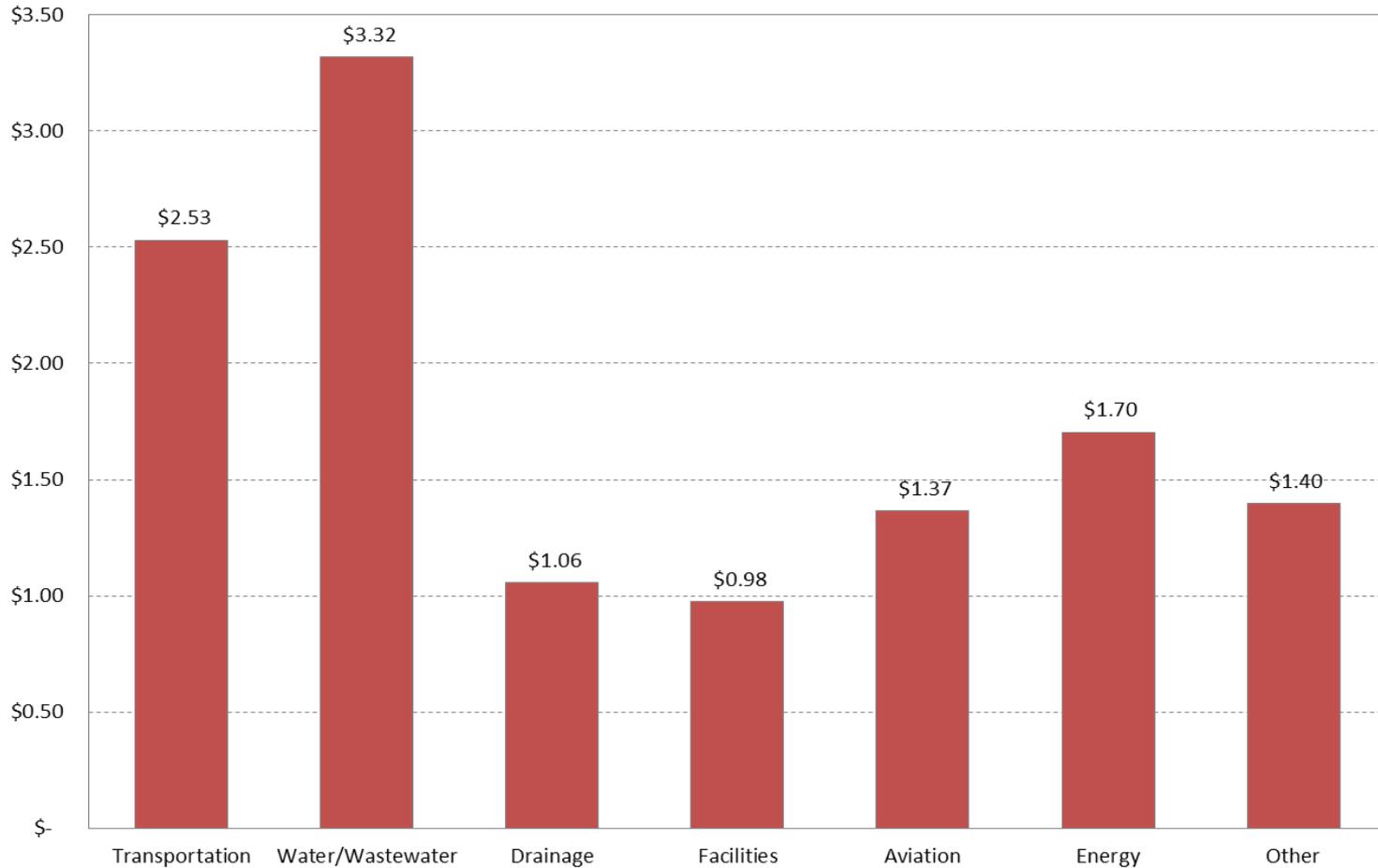
# Total Work Distribution (# Projects)



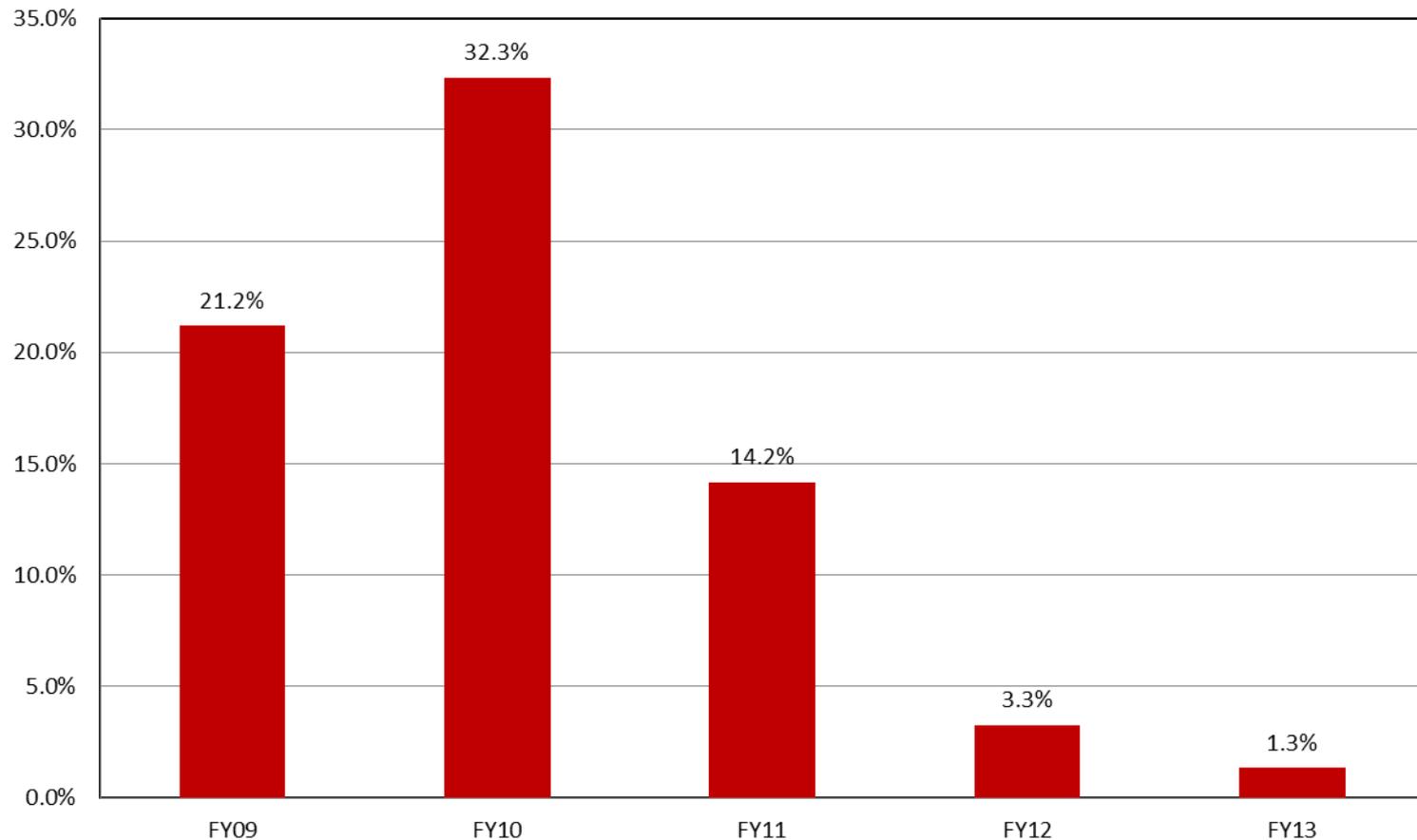
# Total Work Distribution Comparison



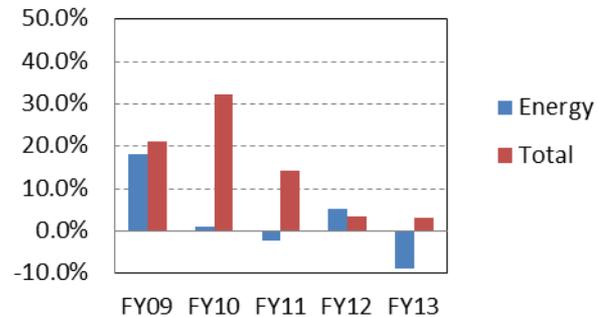
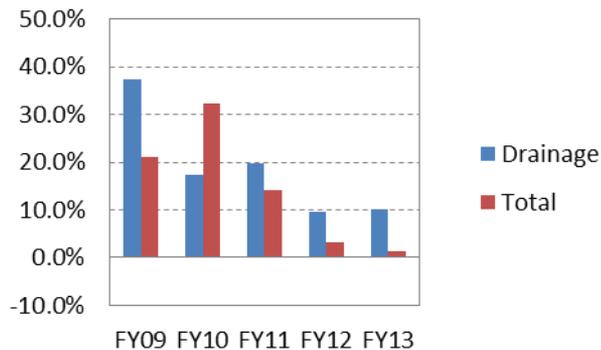
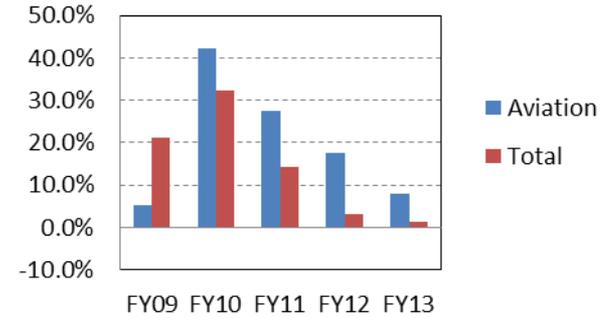
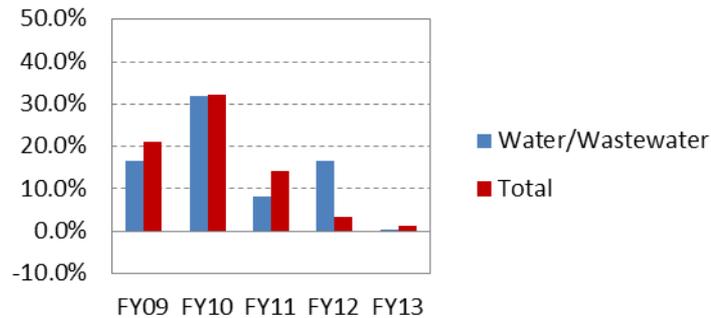
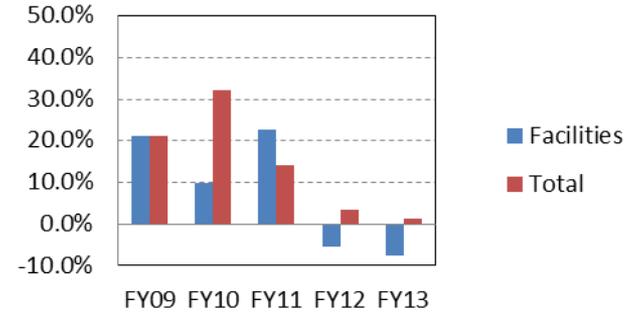
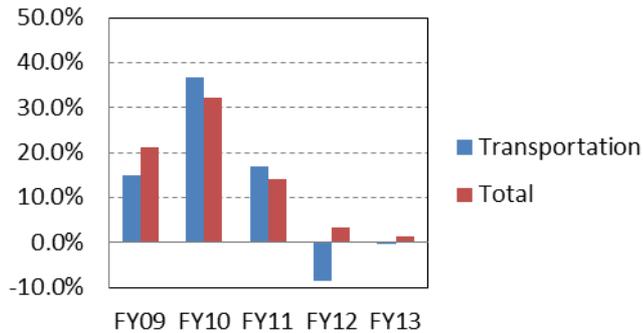
# Average Cost/Project by Type (\$M)



# Variance between Estimate and Award



# Variance Trends by Work Type



# Observations

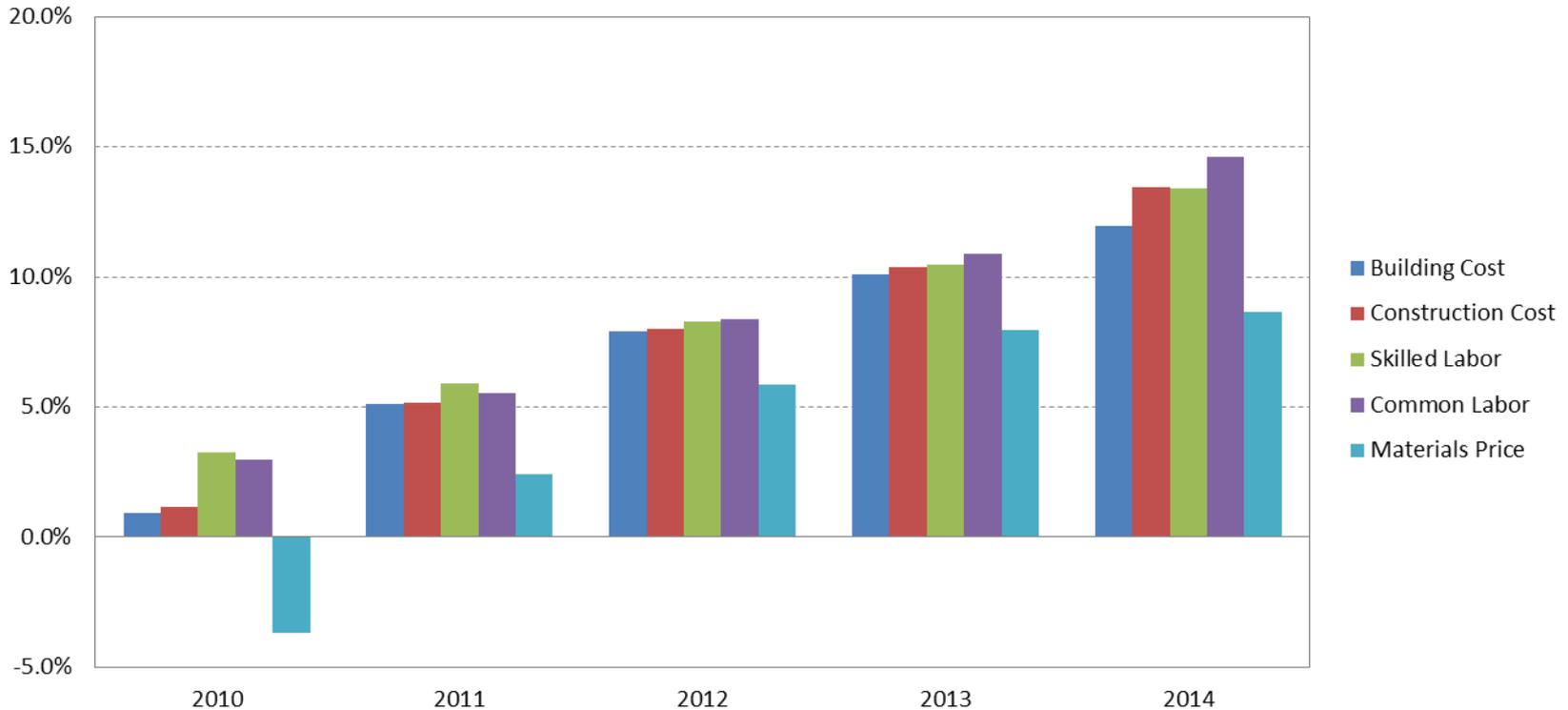
- Water/wastewater and transportation projects comprise the majority of the work considered.
- The gap between the project estimates and construction costs is narrowing.
- Planned General Obligation bond program expenditures are decreasing as planned projects are completed.



# Industry Cost Trends



# Key Materials and Labor Cost Indexes



Data shown are ENR cumulative index percent change using 2009 as a base year.



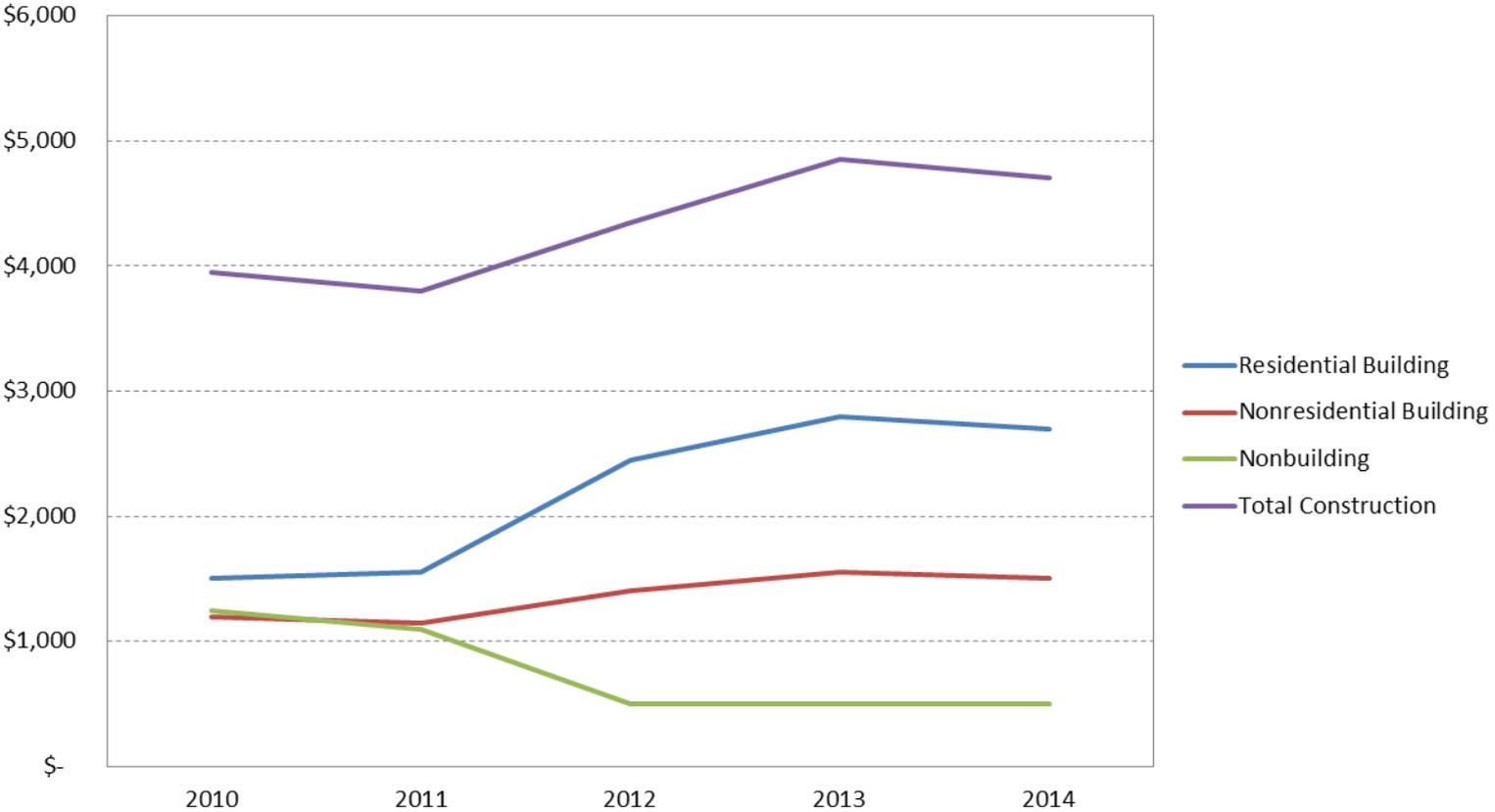
# Construction Material Price Movement (2013-2014)

MATERIAL	ANNUAL CHANGE
Aggregates	+3.1%
Aluminum Sheet	-3.9%
Asphalt Paving	+1.6%
Cement	+4.0%
Concrete Pipe	+3.3%
Copper Pipe	-5.0%
Ductile Iron Pipe	+0.4%
Fabricated Steel	+0.1%
Gypsum Products	+10.2%
Lumber, Softwood	+2.8%
Plywood	-2.5%
PVC Products	+0.1%
Ready-Mix Concrete	+3.1%



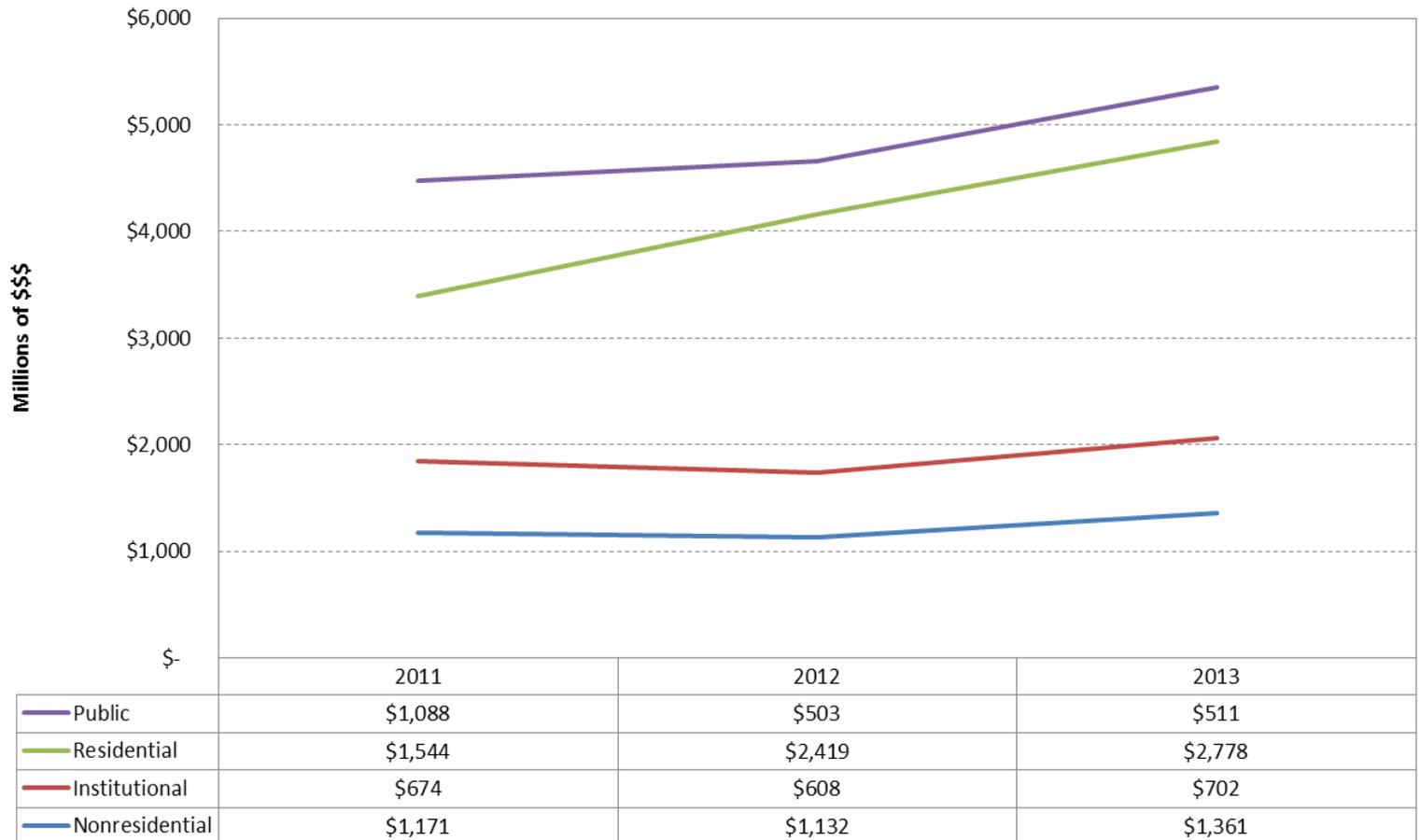
# Austin Construction Market Activity

## Total Picture (\$M)

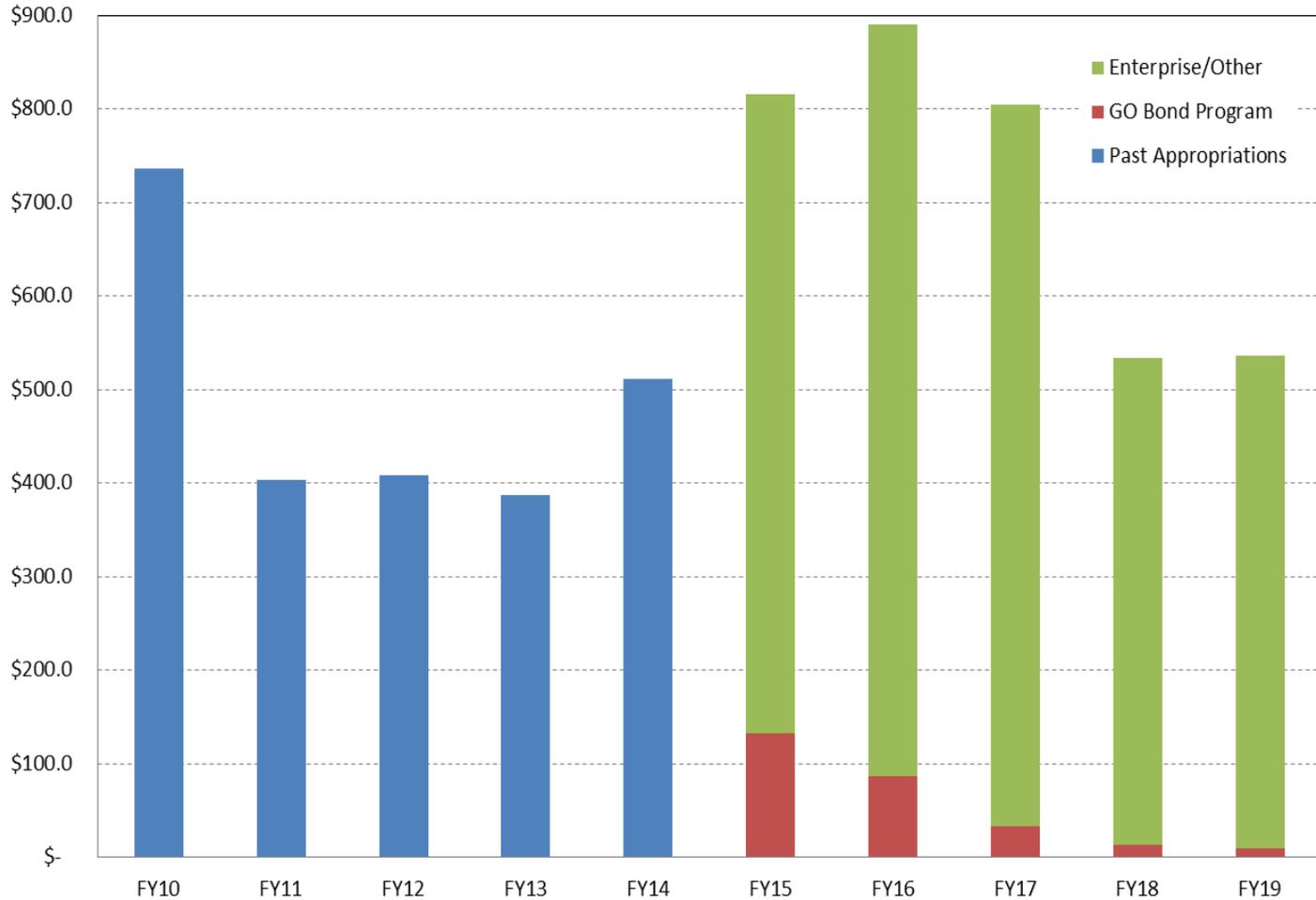


# Austin Construction Market Activity

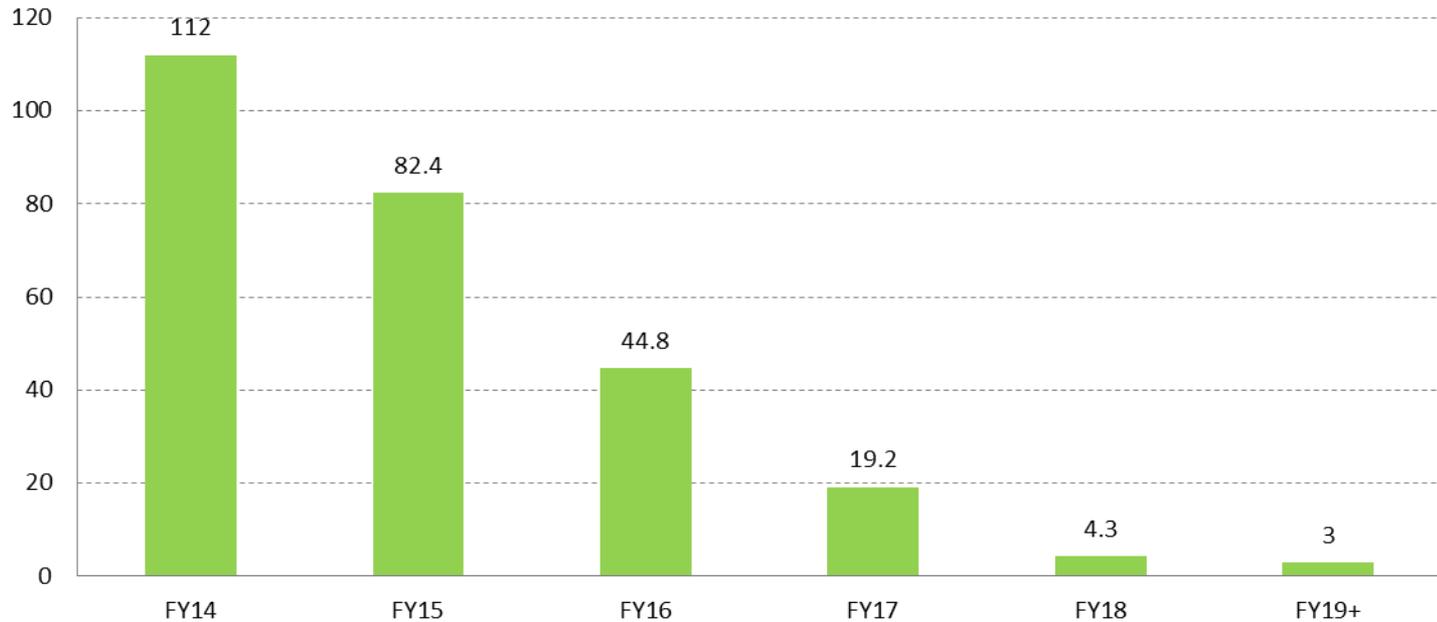
## Construction Starts (\$M)



# COA CIP Program (\$M)



## Transportation Capital Spending (\$M)



Maintenance of the existing road network at >80% satisfactory requires >\$50M per year in reconstruction/rehabilitation.

Annual ADA Transition Plan funding requirement is \$10M.

Missing sidewalk network requirements are estimated at ~\$800M.



# Observations

- Construction costs nationally have increased ~12%-13% since 2010.
- Key materials increases over the past year in concrete and related materials.
- Austin market shows continued growth.
- Spending on GO and transportation projects will decrease over the next several years as current bond programs are completed.



# Threats and Opportunities

	Threat	Opportunity
Strong local market	Competition for resources may drive up prices.	Robust market draws additional parties into the area.
Competition for use of City ROW	Increase in street closures and ROW obstructions.	Provides opportunity to partner on infrastructure work with others.
Stability of technical workforce	Strong economy may draw skilled staff to private sector.	Readjust staffing levels through turnover as workload changes.

