

CITY OF AUSTIN

COMMODITY CODES CROSSWALK PROJECT

Presentation to MBE/WBE & Small Business
Procurement
Advisory Committee
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Key Project Objectives

- Establish methodical relationships between City Bid Items and commodity code selections.
- Increase the accuracy and consistency of commodity codes used in conjunction with project trade summaries.
- Improve participation of Certified Minority and Women Owner Business Enterprises.

Some Key Terms & Concepts

- **Commodity Code** is a classification tool
- **Cross-Walk** builds relationships between two or more standardized sets of commodity or service codes
- **Construction Standards Institute (CSI) MasterFormat Specification Divisions**
- **National Institute of Governmental Purchasing (NIGP) Code** used for COA vendors
- **Standard Bid Items** City of Austin construction specifications
- **Trade Summary** (Cost estimate with trade scopes)
- **eCAPRIS** (City of Austin electronic reporting system)

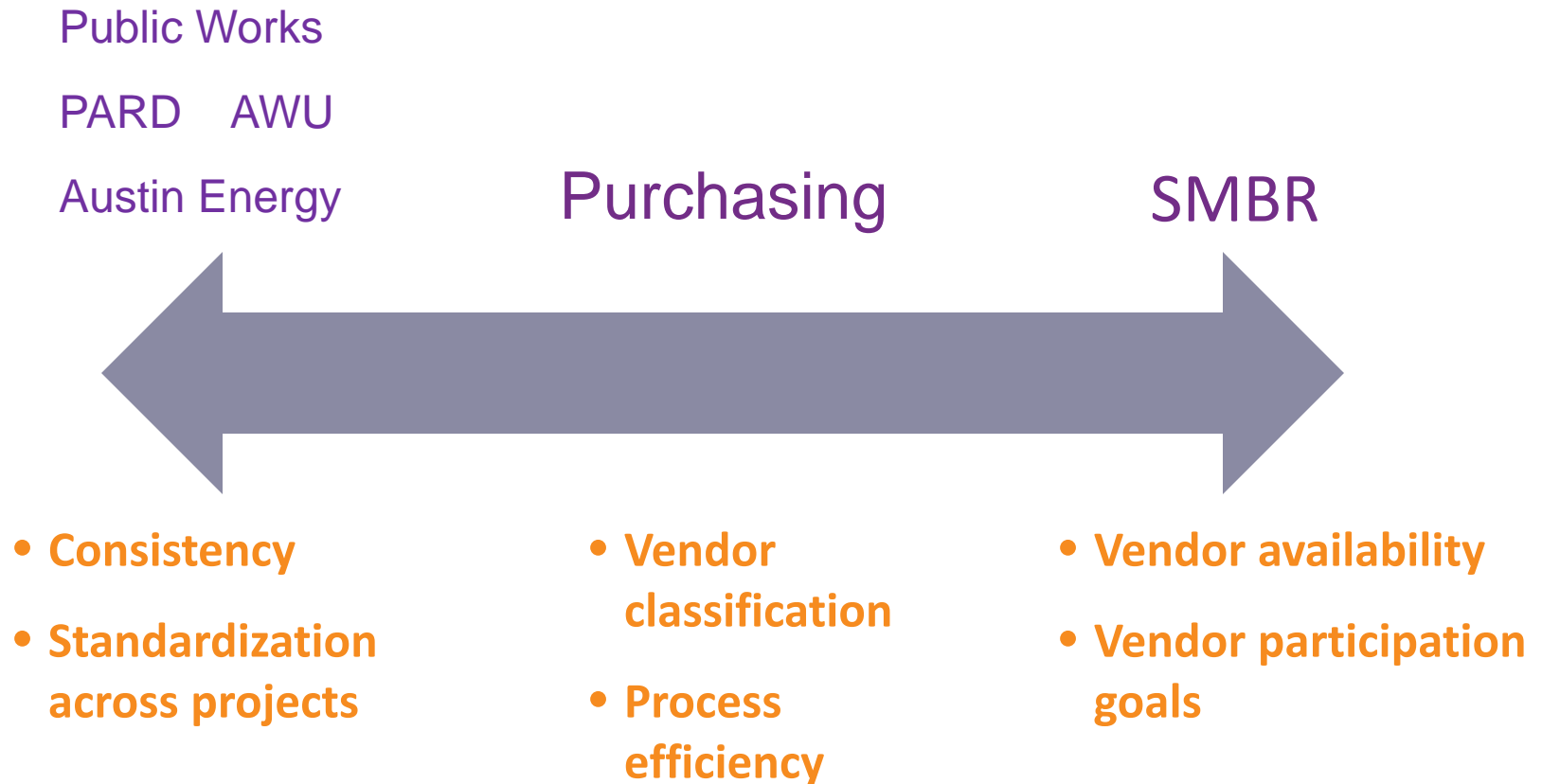
Process Now

- City uses a single database for all suppliers across all procurement types (e.g., construction projects, historically disadvantaged businesses, vendor products, “standard”)
- Design Consultants provide Probable Opinion of Cost in various formats
- City Project Managers enter cost and trade scopes into eCAPRIS using best professional experience
- Availability list for each project based on trade summary

The Task

- When planning and acquiring construction, many engineering firms use the Construction Standards Institute's MasterFormat™ as a way of breaking down supplies and services.
- There has not been a fully rationalized process to connect the CSI MasterFormat to the NIGP Commodity Code structure.
- This complicates selecting both prime- and subcontractors, who, when they register do so at the 5- and 7-digit NIGP level.

Broad Spectrum of Stakeholders & Goals

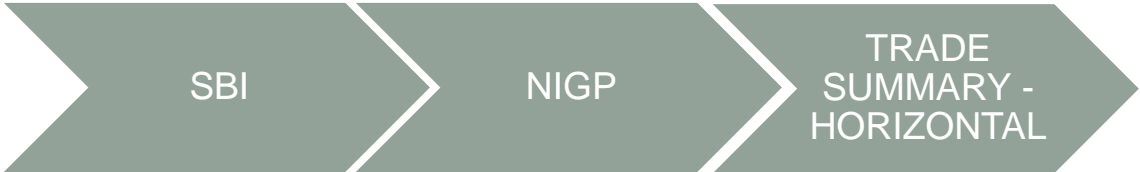


The Process

- End-to-End Process Review
 - Internal stakeholders
 - Public Works Project Management
 - Department of Small and Minority Business Resources
 - Purchasing
 - IT
 - External Stakeholders
 - Austin General Contractors
 - Minority and woman-owned business community
- RFI
 - Potential providers
- RFP
 - Competitive acquisition and contract negotiation

Vertical vs. Horizontal Construction

Cross-Walk = Translation Between Commodity Codes



Project Activities

- Inquiry search identified contracts with Certified subs
- Cross checked those items with most often used codes
- Identified 1,128 NIGP codes to cross-walk
- **Results: Separate codes into 3 groups:**
 1. NIGP codes applicable to construction with related CSI code
 2. NIGP codes not applicable to construction or no related CSI code.
 3. Codes not registered with NIGP

1. NIGP Codes with Applicable CSI Code

- Use 5 digit NIGP Codes
 - Vendors currently registered under 7 digit code will be rolled up to 5 digit code
- Use first 3 to 4 digits of CSI Codes
 - 08 50 00 - Windows vs. 08 51 13 - Aluminum Windows
 - Window vendor would not need to register for large number of codes
- Project Managers currently reviewing code list

08 50 00	Windows
08 51 00	Metal Windows
08 51 13	Aluminum Windows
08 51 16	Bronze Windows
08 51 19	Stainless-Steel Windows
08 51 23	Steel Windows
08 51 66	Metal Window Screens
08 51 69	Metal Storm Windows
08 52 00	Wood Windows
08 52 13	Metal-Clad Wood Windows
08 52 16	Plastic-Clad Wood Windows
08 52 66	Wood Window Screens
08 52 69	Wood Storm Windows
08 53 00	Plastic Windows
08 53 13	Vinyl Windows
08 53 66	Vinyl Window Screens
08 53 69	Vinyl Storm Windows
08 54 00	Composite Windows
08 54 13	Fiberglass Windows
08 54 66	Fiberglass Window Screens
08 54 69	Fiberglass Storm Windows

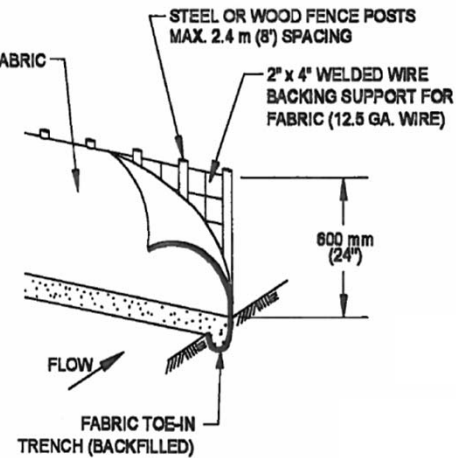
Commodity Code Cross-Walk Project

CSI Codes Concrete - Microsoft Excel

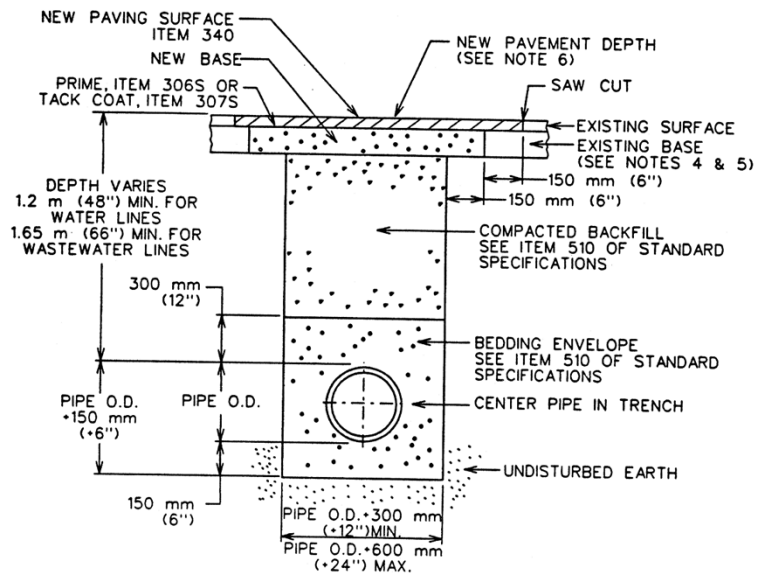
2012 SECTION		2012 TITLE		NIGP Codes	
751	03 00 00	Concrete	750-70-06	CONCRETE, READY MIX	
752	03 01 00	Maintenance of Concrete	913-61	Construction, Vertical, Concrete, Pour-In-Place, Form/Place/Finish	
753	03 01 10	Maintenance of Concrete Forming and Accessories	913-61	Construction, Vertical, Concrete, Pour-In-Place, Form/Place/Finish	
754	03 01 20	Maintenance of Concrete Reinforcing	913-61	Construction, Vertical, Concrete, Pour-In-Place, Form/Place/Finish	
755	03 01 23	Maintenance of Stressing Tendons	913-61	Construction, Vertical, Concrete, Pour-In-Place, Form/Place/Finish	
756	03 01 30	Maintenance of Cast-in-Place Concrete	913-61	Construction, Vertical, Concrete, Pour-In-Place, Form/Place/Finish	
757	03 01 30.51	Cleaning of Cast-in-Place Concrete	913-61	Construction, Vertical, Concrete, Pour-In-Place, Form/Place/Finish	
758	03 01 30.61	Resurfacing of Cast-in-Place Concrete	913-61	Construction, Vertical, Concrete, Pour-In-Place, Form/Place/Finish	
759	03 01 30.71	Rehabilitation of Cast-in-Place Concrete	913-61	Construction, Vertical, Concrete, Pour-In-Place, Form/Place/Finish	
760	03 01 30.72	Strengthening of Cast-in-Place Concrete	913-61	Construction, Vertical, Concrete, Pour-In-Place, Form/Place/Finish	
761	03 01 40	Maintenance of Precast Concrete	913-61	Construction, Vertical, Concrete, Pour-In-Place, Form/Place/Finish	
762	03 01 40.51	Cleaning of Precast Concrete	913-61	Construction, Vertical, Concrete, Pour-In-Place, Form/Place/Finish	
763	03 01 40.61	Resurfacing of Precast Concrete	913-61	Construction, Vertical, Concrete, Pour-In-Place, Form/Place/Finish	
764	03 01 40.71	Rehabilitation of Precast Concrete	913-61	Construction, Vertical, Concrete, Pour-In-Place, Form/Place/Finish	
765	03 01 40.72	Strengthening of Precast Concrete	913-61	Construction, Vertical, Concrete, Pour-In-Place, Form/Place/Finish	
766	03 01 50	Maintenance of Cast Decks and Underlayment	913-61	Construction, Vertical, Concrete, Pour-In-Place, Form/Place/Finish	
767	03 01 50.51	Cleaning Cast Decks and Underlayment	913-61	Construction, Vertical, Concrete, Pour-In-Place, Form/Place/Finish	
768	03 01 50.61	Resurfacing of Cast Decks and Underlayment	913-61	Construction, Vertical, Concrete, Pour-In-Place, Form/Place/Finish	
769	03 01 50.71	Rehabilitation of Cast Decks and Underlayment	913-61	Construction, Vertical, Concrete, Pour-In-Place, Form/Place/Finish	
770	03 01 50.72	Strengthening of Cast Decks and Underlayment	913-61	Construction, Vertical, Concrete, Pour-In-Place, Form/Place/Finish	
771	03 01 60	Maintenance of Grouting	910-51	MASONRY, CONCRETE, AND STUCCO MAINTENANCE, FINISHING, AND REPAIR (INCLUDES INSIDE CONCRETE SAWING AND	
772	03 01 70	Maintenance of Mass Concrete	913-61	Construction, Vertical, Concrete, Pour-In-Place, Form/Place/Finish	
773	03 01 80	Maintenance of Concrete Cutting and Boring	912-16-14	BORING, DRILLING, MOBILIZATION AND SAMPLING SERVICES	
774	03 05 00	Common Work Results for Concrete	913-61	Construction, Vertical, Concrete, Pour-In-Place, Form/Place/Finish	
775	03 06 00	Schedules for Concrete	913-61	Construction, Vertical, Concrete, Pour-In-Place, Form/Place/Finish	
776	03 06 10	Schedules for Concrete Forming and Accessories	913-61	Construction, Vertical, Concrete, Pour-In-Place, Form/Place/Finish	
777	03 06 20	Schedules for Concrete Reinforcing	913-61	Construction, Vertical, Concrete, Pour-In-Place, Form/Place/Finish	
778	03 06 20.13	Concrete Beam Reinforcing Schedule	913-13	CONSTRUCTION, BRIDGE AND DRAWBRIDGE (INCLUDES RECONSTRUCTION/REHABILITATION)	
779	03 06 20.16	Concrete Slab Reinforcing Schedule	913-13	CONSTRUCTION, BRIDGE AND DRAWBRIDGE (INCLUDES RECONSTRUCTION/REHABILITATION)	
780	03 06 30	Schedules for Cast-in-Place Concrete	913-61	Construction, Vertical, Concrete, Pour-In-Place, Form/Place/Finish	

Examples

- Silt Fence



- Pipe: 6-inch DIP waterline



Commodity Code Cross-Walk Project

Asphalt						
Bid Item	\$/unit (square yard)	Component	Component Cost (%)	Commodity Code	Commodity Description	\$/Code
340S-B	\$ 23.60	HMAC	37%	745-21	Asphaltic Concrete, Hot Laid Including Bituminous Material	\$ 8.82
				913	CONSTRUCTION SERVICES, HEAVY (INCL. MAINTENANCE AND REPAIR	
		Tack Coat	1%	913-50	Construction, Street (Major and Residential)(Includes Reco	\$ 0.34
		Hauling (includes labor and equipment)	6%	962-39-06	HAULING SERVICES, ASPHALT MATERIAL	\$ 1.37
		Equipment (includes demolition of existing HMAC, paving, compaction, grading, emulsion)	16%	760	ROAD AND HIGHWAY EQUIPMENT: EARTH HANDLING, GRA	\$ 3.72
		Labor(includes demolition of existing HMAC, paving, compaction, grading, emulsion)	20%	912-40-20	DEMOLITION SERVICES	\$ 4.63
				913-94	Paving/Resurfacing, Alley and Parking Lot	
				913-95	Paving/Resurfacing, Highway and Road	
				913-96	Paving/Resurfacing, Street (Major and Residential)	
				913-50	Construction, Street (Major and Residential)(Includes Reconstruction)	
		Overhead & Profit (20%)	20%			\$ 4.72
		Total	100%			\$ 23.60
		Assumptions:				
		Existing HMAC 3" thick				
		New HMAC 3" thick, Type C				
		12 CY dump truck, 10 mi round trip, 0.6 load/hr				
		10% compaction (1 CY = 1.1 LCY)				
		Tack coat, emulsion, 0.05 gal/SY, 1000 SY				
		Compaction cost (labor and equipment) included in paving cost				
		Used 2007 RS Means for component break down				
		Maximum allowable O&P				



Project Activities

- **Phase 1: Proof of Concept**
- Sample Bid Items and CSI Cross-walks
- Stakeholder Input
- City Staff process interviews

- **Phase 2: Implementation**
- **Build Cross-Walks**
- Coordinate with City CTM
- Stakeholder Input and Review
- Findings and Recommendations

What We've Discovered

- Not practical to break out every bid item into multiple components
- Most common bid items assigned to subcontractors include erosion control, hauling and traffic handling
- Some categories (i.e. paving) have few competitors in the local market
- Many bid items require broad assumptions which can lead to inconsistent application

Horizontal Projects (SBI to NIGP)

Phase 2 Implementation

- Completed preliminary bid item component breakdowns for 12 identified bid items.
- Reviewed preliminary bid item components and percentages with City and local Contractor Central Road & Utility (CRU).
- Received comments from City and CRU regarding bid item components and percentages.

Vertical Projects (CSI to NIGP)

Phase 2 Implementation

- Periscope built initial crosswalk of NIGP Codes to CSI Codes.
- Reviewed the mapped and unmapped items with Public Works.
- Reviewed NIGP Codes with recent City contracting and compared to codes in initial crosswalk.
- Propose strategy to produce a core CSI-NIGP Code Crosswalk implemented for maximum initial benefit to the City and its vendor community.
- LAN assisted Periscope with this effort as a technical resource.
- The result organized the City's utilized NIGP codes into 3 categories:
 - NIGP codes applicable to construction with related CSI code
 - NIGP codes not applicable to construction or no related CSI code
 - Codes not registered with NIGP

Recommendations for Moving Forward

Horizontal Projects:

- Continue crosswalk effort for approximately 40-45 additional standard bid items methodology established through above coordination.
- Pilot test crosswalk on completed construction projects.
- Seek public input from contractors and external stakeholders.
- Analyze number of additional standard bid item crosswalks needed for City projects.

Recommendations for Moving Forward

Vertical Projects:

- Identify NIGP Codes utilized by M/WBE vendors for which no contracting activity exists; work with City on communication to the vendor community.
- Conduct internal stakeholder group meeting to review crosswalk and discuss impact of 5-digit vs. 7-digit approach.
- Seek external stakeholder input on the initial crosswalk.
- Adjust crosswalk based on feedback.
- Discuss implementation considerations with IT and other stakeholders.
- Identify test cases with the city and assess the crosswalk's impact on the test cases in conjunction with SMBR.

Challenges & Lessons Learned



- Crosswalks are never perfectly “clean”
- Reasonable debate between registering vendors at different Code levels
- Testing required to answer a key question: *Are we simply cutting smaller pieces, or are we making the pie bigger?*



NEXT STEPS

