



# IU Realignment with RS Means



CAS/CAIS User Group Meeting  
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# Agenda

1. Current RS Means data setup in CAIS
2. Annual RS Means Costing Update
3. Conclusions
4. Next Steps





# Currently in CAIS

- ▶ Gateway to RS Means data is through the following fields
  - ▶ Volume
  - ▶ WBS
  - ▶ Component
  - ▶ Type
- ▶ Type Search screen provides an alternative to manually populating these fields
- ▶ Many years ago, mapping between RS Means data and these four data elements was developed (Not by RS Means)
- ▶ During CAIS 3.0 development, this mapping and RS Means database design was left intact recognizing we would revisit





**IU Detail** | Attachments | Cost Adders | Cumulative Adders | Deficiencies

Field Office: EMCBC    Site Name: Mound    Area Name: All  
Property ID: 45    Property Name: Neutron Standards    Property Type: Building

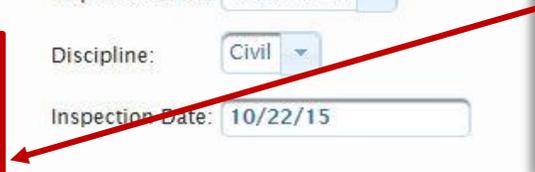
**Required**

IU Number: 283125    Inspector Name: Pugh, Adam  
Volume: C30 / Interior Finishes    Discipline: Civil  
WBS: Int;Ceilings;Acoustical    Inspection Date: 10/22/15  
Component: INT;CEILING;ACOUSTICAL / SQFT  
Type: Suspended acoustic ceiling tiles, mineral fiber tile, lay-in, rough texture, 2' x 2' or 2' x 4', 5/8" thick / 095123101115

Quantity: 400    Repair Cost: \$0    Deferred Maintenance Flag: Yes  
Replacement Qty: 400    Replacement Cost: \$784    Repair Needs Flag: Yes  
Engineered Cost:    National Average Cost: \$784    Modernization Flag: No  
Urgency: Repair Within 1 Year    Official Cost: \$784    Modernization Type:     
Condition: Adequate    Completed Cost:    Location: Asset Wide

Location Description:     
Equipment ID:     
Description: replace existing stained/damaged ceiling tiles  
Comments: (limit 2000 characters)

Volume: C30 / Interior Finishes  
WBS: Int;Ceilings;Acoustical  
Component: INT;CEILING;ACOUSTICAL / SQFT  
Type: Suspended acoustic ceiling tiles, mineral





# Currently in CAIS (continued)

- ▶ This mapping relationship between the RS Means data and the CAIS database historically has not been accurately maintained
  - ▶ CAIS contains obsolete data that is no longer supported by RS Means
  - ▶ New RS Means data is not getting into CAIS because these new items are not built into the mapping relationship
  - ▶ The level of effort needed to do this would be rather significant
- ▶ The RS Means Line Number which is unique to RS Means is not necessarily unique in the CAIS database
- ▶ Unnecessarily overcomplicating the database structure
- ▶ Prevents us from modifying the upload process to allow new IU's to be created in CAIS



# Annual RS Means Costing Update

- ▶ Have conducted a detailed analysis of this process
- ▶ Very time consuming to implement in large part because of the mapping of RS Means data into the Volume, WBS, Component and Type fields
- ▶ Annual costing update also includes processes that are questionable with references/updates to prices from 2007
  - ▶ Some items have their cost updated by a conversion factor based on a 2007 file



# Annual RS Means Costing Update

(continued)

- ▶ Questionable escalations in cost occur for obsolete RS Means items
  - ▶ Costs are escalated using the RS Means Any City Inflator
    - ▶ Based on Historical Cost Index of building construction cost data. Highlights increase in RS Means publications from year to year. Value for 2016 was 1.0048496.
- ▶ New obsolete items are flagged and maintained forever
- ▶ Deviating from RS Means by converting some Unit of Measures in CAIS
- ▶ Forces us to maintain CAIS specific keys which are different from RS Means



# Annual RS Means Costing Update

(continued)

- ▶ In some instances, RS Means Line items that are renamed are not being renamed in CAIS
- ▶ Other Processes that occur
  - ▶ Updates RPV ratios for System Level Deficiency window
  - ▶ Updates Geographic Adjusters
  - ▶ No issues with these



# Conclusion



- ▶ There is a clear disconnect between some of the RS Means and CAIS data
- ▶ We are paying for data that we are not using
- ▶ The annual costing update has many questions and is resource intensive to implement
  - ▶ Many weeks are spent testing and analyzing the costing update even before we run in production
- ▶ Need to use our labor resources more wisely. Spending weeks implementing a somewhat flawed process seems unwise.



# What do to next?

- ▶ The Cost Estimating Module was developed to perfectly align with the RS Means data and makes annual updates simple
- ▶ Proposal to modify CAIS to adapt the RS Means backend design that we currently use in the Cost Estimating Module
  - ▶ Eliminate the WBS, Component and Type from having to be manually populated. Volume would only have to be populated for Master Format.
  - ▶ Use the Cost Estimating Module Type Search capability to select RS Means items for IU records
  - ▶ The cost calculation process would be exactly the same
  - ▶ Would allow complete access to all Assembly, Maintenance Assembly, Master Format and Maintenance Master Format data
  - ▶ Would allow us to modify the upload process to accept new IU's
  - ▶ Would need to migrate obsolete RS Means items to new RS Means items



# Use the Estimate Type Search

- ▶ Search capability based on
  - ▶ RS Means Line Number
  - ▶ Assembly, Maintenance Assembly, Master Format and Maintenance Master Format
  - ▶ Unlimited word search capability on the Type Description
  - ▶ Hierarchical tree structure for Assembly and Master Format
  - ▶ Search results that can be filtered and sorted



Field Office: EMCBC    Site Name: Mound    Area Name: All  
 Property ID: 45    Property Name: Neutron Standards    Property Type: Building

**Required**

IU Number:     Inspector Name:

Volume:     Discipline:

~~WBS:~~     Inspection Date:

~~Component:~~     **RS Means Line Number**

Type:

Quantity:     Repair Cost:     Deferred Maintenance Flag:

Replacement Qty:     Replacement Cost:     Repair Needs Flag:

Engineered Cost:     National Average Cost:     Modernization Flag:

Urgency:     Official Cost:     Modernization Type:

Condition:     Completed Cost:     Location:

Location Description:

Equipment ID:

Description:

Comments: (limit 2000 characters)

Enhanced IU Type Search

Add this button or default to this window first on a New IU

Add this field

