INEIGHT

Explore API Documentation

SelfService_Estimate_CostItemCalculatedValue

Version 4.0

Last Modified: 10-Dec-2025

Last Modified By: Litzy Mora

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Change Log

This changelog only contains significant or notable changes to the revision. Any editorial type changes or minor changes are not included.

Revision	Change Date	Description	Modified By
1.0	18-Mar-2022	Initial draft	Natalie Takacs
2.0	22-Dec-2022	Updated pagination	Litzy Mora
3.0	20-Jul-2023	Added 2 fields and updated sample data	Aaron Cohen
4.0	10-Dec-2025	Updated refresh data	Litzy Mora

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Overview

The ***SelfService_Estimate_CostItemsCalculatedValues*** API is one of multiple APIs comprising the data contained in the Estimate Cost Item entity. A Cost Item is an item representing an activity for a scope of work being estimated. It is commonly a collection of resource employments, labor, equipment, material, etc., whose quantities are related to the amount or work or duration of the activity. The total cost of a Cost Item can be based on its detailed resource employments, or it can be a plug cost, or it can be determined from the proportional amount of an awarded quote. Cost Items have a position in a hierarchy of costs, all or which roll up to the Job level, which is the top level cost item representing the projects total estimated cost. Terminal level cost items are where all the costs in an estimate exist, either as detailed, plugged or quoted costs, and superior cost items are cost items having subordinate and/or terminal cost items belonging to them. Superior Cost Items do not contribute to the cost of the estimate but rather roll up the costs of all cost items belonging to them.

The Estimate Cost Item entity mainly includes three tables, *SelfService_Estimate_CostItems*, *SelfService_Estimate_CostItemsCalculatedValues* and *SelfService_Estimate_CostItemsReferencedData*.

The *SelfService_Estimate_CostItems* table contains Cost Items as created and managed within the Estimate application.

The *SelfService_Estimate_CostItemsCalculatedValues* table contains Cost Item data commonly calculated in some way for display purposes in the application and can provide a convenient way to reference data as it appears in the application without needing to transform it for display purposes.

The *SelfService_Estimate_CostItemsReferencedData* contains the values of the many foreign key lookup values stored in reference tables and can provide a convenient way to reference data as it appears in the application without needing to lookup the foreign key values from a lookup table.

Monetary values stored in the database are stored in their base currency and corresponding values displayed in the application have been modified based on the conversion factor of the items assigned currency.

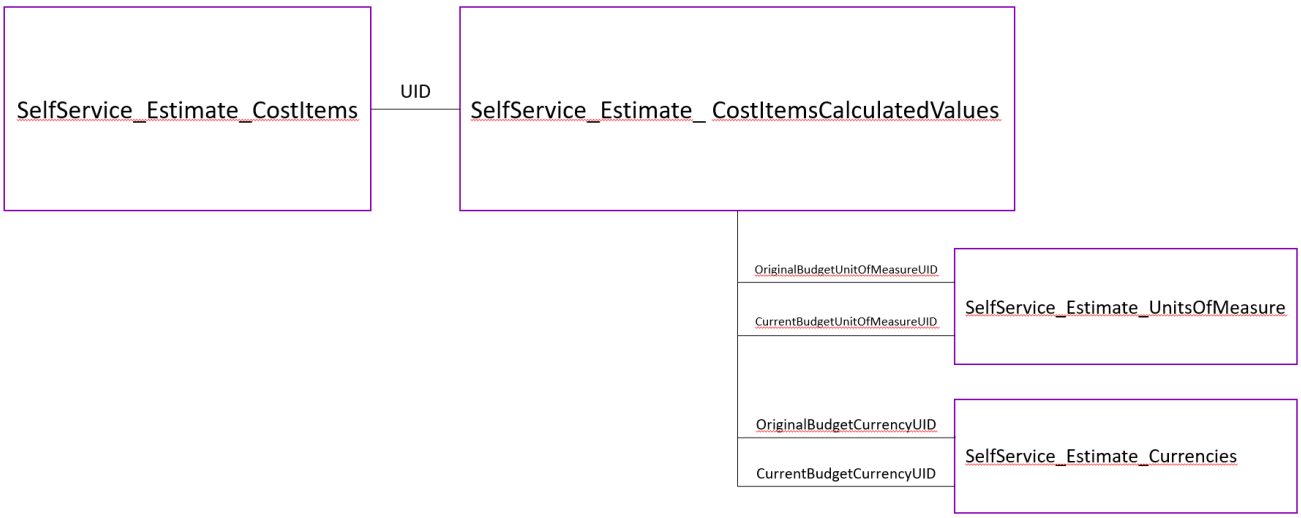
Quantity values stored in the database are stored in their base measurement units and corresponding values displayed in the application are potentially modified based on the conversation factor of the items unit of measure

Relationships and Dependencies

From: Table	To: Table	Relationship	Cardinality[1]	Comment
CostItemsCalculatedValues(CICV)	CostItems (CI)	CICV.UID = CI.UID	1:1	
CostItemsCalculatedValues(CICV)	UnitsOfMeasure (OBUM)	CICV.OriginalBudgetUnitOfMeasureUID = OBUM.UID	1:M	
CostItemsCalculatedValues(CICV)	UnitsOfMeasure (CBUM)	CICV.CurrentBudgetUnitOfMeasureUID = CBUM.UID	1:M	
CostItemsCalculatedValues(CICV)	Currencies (OBCUR)	CICV.OriginalBudgetCurrencyUID = OBCUR.UID	1:M	
CostItemsCalculatedValues(CICV)	Currencies (CBCUR)	CICV.CurrentBudgetCurrencyUID = CBCUR.UID	1:M	

[1] *1:M = One to Many, 1:1 = One to One, M:1 = Many to one*

SelfService_Estimate_CostItemsCalculatedValues



API Detail

Direction		From Project Suite
Pagination		5,000 Rows
Frequency		All Reporting APIs are used by calling a GET method at an interval determined by the customer. InEight suggests using these APIs on an infrequent basis (once per day) to avoid potential performance impact to live systems when the returned data set could be large.
Trigger Method(s)		All default OData filters are supported
Average Payload Size		Depends on date range selected
APIM Name		SelfService_Estimate_CostItemCalculatedValue
Replicate View		[SelfService].[vwEstimateCostItemCalculatedValue]
Data Refresh/Delta/Incremental Loads		The refresh of the data in this API is sync-based. The time it takes data to appear in this API is dependent on the load on the server at the time. If it takes more than 15 minutes, please submit a ticket with the Service Desk.
Project Suite	**Starting Version**	21.5
	Ending Version	N/A

Supported Filters

All default OData filters are supported by this API.

Fields

Name	Type	Max Length	Numeric Precision	Date Precision	Product	PK

EstimateCostItemCalculatedValueId	bigint	8	19	0	Estimate	X
EstimateCostItemCalculatedValueUF	uniqueidentifier	16	0	0	Estimate	
EstimateCostItemCalculatedValueUID	uniqueidentifier	16	0	0	Estimate	
C_WbsDetailDescription_0	nvarchar	600	0	0	Estimate	
C_WbsDetailDescription_1	nvarchar	600	0	0	Estimate	
C_WbsDetailDescription_2	nvarchar	600	0	0	Estimate	
C_WbsDetailDescription_3	nvarchar	600	0	0	Estimate	
C_WbsDetailDescription_4	nvarchar	600	0	0	Estimate	
C_WbsDetailDescription_5	nvarchar	600	0	0	Estimate	
C_WbsDetailDescription_6	nvarchar	600	0	0	Estimate	
C_WbsDetailDescription_7	nvarchar	600	0	0	Estimate	
C_WbsDetailDescription_8	nvarchar	600	0	0	Estimate	
C_WbsDetailDescription_9	nvarchar	600	0	0	Estimate	
AllocationQuantity	float	8	53	0	Estimate	
AllocationSourceCostItemText	nvarchar	1000	0	0	Estimate	
AllocationTotalCost	float	8	53	0	Estimate	
AllowAsBuiltChoice	nvarchar	100	0	0	Estimate	
AlternateDescription	nvarchar	2000	0	0	Estimate	
Awardee	nvarchar	500	0	0	Estimate	
BenchmarkItemFilterAsBuiltText	nvarchar	8000	0	0	Estimate	
BenchmarkItemFilterAsEstimatedText	nvarchar	8000	0	0	Estimate	
BenchmarkJobFilterInheritedAsBuiltText	nvarchar	8000	0	0	Estimate	
BenchmarkJobFilterInheritedAsEstimatedText	nvarchar	8000	0	0	Estimate	
BenchmarkJobFilterOverrideAsBuiltText	nvarchar	8000	0	0	Estimate	
BenchmarkJobFilterOverrideAsEstimatedText	nvarchar	8000	0	0	Estimate	
BenchmarkLastUpdated	datetime	8	23	3	Estimate	
BenchmarkManHoursPerUnitAverage	float	8	53	0	Estimate	
BenchmarkManHoursPerUnitHigh	float	8	53	0	Estimate	
BenchmarkManHoursPerUnitLow	float	8	53	0	Estimate	
BenchmarkManHoursPerUnitStdDev	float	8	53	0	Estimate	
BenchmarkManHoursPerUnitVariance	float	8	53	0	Estimate	
BenchmarkNumberOfDataPoints	int	4	10	0	Estimate	
BenchmarkUnitCostAverage	float	8	53	0	Estimate	
BenchmarkUnitCostHigh	float	8	53	0	Estimate	
BenchmarkUnitCostLow	float	8	53	0	Estimate	
BenchmarkUnitCostStdDev	float	8	53	0	Estimate	

BenchmarkUnitCostVariance	float	8	53	0	Estimate	
BenchmarkUnitsPerManHourAverage	float	8	53	0	Estimate	
BenchmarkUnitsPerManHourHigh	float	8	53	0	Estimate	
BenchmarkUnitsPerManHourLow	float	8	53	0	Estimate	
BenchmarkUnitsPerManHourStdDev	float	8	53	0	Estimate	
BenchmarkUnitsPerManHourVariance	float	8	53	0	Estimate	
BenchmarkXAxisField	nvarchar	200	0	0	Estimate	
BenchmarkYAxisField	nvarchar	200	0	0	Estimate	
BillingRateAdjustment	float	8	53	0	Estimate	
BillingRateMarkup	float	8	53	0	Estimate	
BillingRateMarkupPercent	float	8	53	0	Estimate	
EstimateBudgetItemUID	uniqueidentifier	16	0	0	Estimate	
CanAllocate	bit	1	1	0	Estimate	
CanHaveHours	bit	1	1	0	Estimate	
CanSuspend	bit	1	1	0	Estimate	
CurrentBudgetCurrencyUID	uniqueidentifier	16	0	0	Estimate	
CurrentBudgetManHours	float	8	53	0	Estimate	
CurrentBudgetQuantity	float	8	53	0	Estimate	
CurrentBudgetTotalCost	float	8	53	0	Estimate	
CurrentBudgetUnitCost	float	8	53	0	Estimate	
CurrentBudgetUnitOfMeasureUID	uniqueidentifier	16	0	0	Estimate	
DefaultAccountDescription	nvarchar	600	0	0	Estimate	
DependentSubjectBillingAmount	float	8	53	0	Estimate	
DependentSubjectBillingAmountRate	float	8	53	0	Estimate	
DependentSubjectCost	float	8	53	0	Estimate	
DependentSubjectCostRate	float	8	53	0	Estimate	
DisplayedAssemblyQuantity	float	8	53	0	Estimate	
DisplayedIsAllocationPayItemInherited	bit	1	1	0	Estimate	
EquipCountQuantity	float	8	53	0	Estimate	
FilterByAssembly	nvarchar	100	0	0	Estimate	
FilterByCostItemIsDelta	nvarchar	100	0	0	Estimate	
FilterByEmploymentIsDelta	nvarchar	100	0	0	Estimate	
FilterByResource	nvarchar	100	0	0	Estimate	
FilterByResourceAccount	nvarchar	100	0	0	Estimate	
FilterByResourcesWithWastePercentage	bit	1	1	0	Estimate	
FilterByResourceType	nvarchar	100	0	0	Estimate	
FilterByScheduleRelation	nvarchar	200	0	0	Estimate	
HasAdjustmentValues	bit	1	1	0	Estimate	

HasAdjustmentValuesBilling	bit	1	1	0	Estimate	
HasExcelLinks	bit	1	1	0	Estimate	
HasPeriodCountMismatch	bit	1	1	0	Estimate	
HasResourcePeriods	bit	1	1	0	Estimate	
HasScheduleRelations	bit	1	1	0	Estimate	
HasSubjectUtilizationFromDependents	bit	1	1	0	Estimate	
Include	bit	1	1	0	Estimate	
IncludeAllocationTarget	bit	1	1	0	Estimate	
IsAllocationDistribution	bit	1	1	0	Estimate	
IsAllocationDistributionSubordinate	bit	1	1	0	Estimate	
IsAllocationTarget	bit	1	1	0	Estimate	
IsAllocationTypePercentage	bit	1	1	0	Estimate	
IsAllocationTypeProportionately	bit	1	1	0	Estimate	
IsAllocationTypeQuantity	bit	1	1	0	Estimate	
IsAllocationTypeUnitCost	bit	1	1	0	Estimate	
IsBenchmarkAllDataPoints	bit	1	1	0	Estimate	
IsBusinessOverhead	bit	1	1	0	Estimate	
IsCostItemAssemblyEmployment	bit	1	1	0	Estimate	
IsCurrentBudgetManHoursDelta	bit	1	1	0	Estimate	
IsCurrentBudgetQuantityDelta	bit	1	1	0	Estimate	
IsCurrentBudgetTotalCostDelta	bit	1	1	0	Estimate	
IsDirectCost	bit	1	1	0	Estimate	
IsJobOverhead	bit	1	1	0	Estimate	
IsOverriddenByAlternate	bit	1	1	0	Estimate	
IsScheduleWBS	bit	1	1	0	Estimate	
IsSuspendedInQuotes	bit	1	1	0	Estimate	
IsVisible	bit	1	1	0	Estimate	
LaborCostPerManHour	float	8	53	0	Estimate	
ManCountQuantity	float	8	53	0	Estimate	
Notes	nvarchar	8000	0	0	Estimate	
OriginalBudgetActualFinish	datetime	8	23	3	Estimate	
OriginalBudgetActualStart	datetime	8	23	3	Estimate	
OriginalBudgetCurrencyUID	uniqueidentifier	16	0	0	Estimate	
OriginalBudgetEarlyFinish	datetime	8	23	3	Estimate	
OriginalBudgetEarlyStart	datetime	8	23	3	Estimate	
OriginalBudgetFinish	datetime	8	23	3	Estimate	
OriginalBudgetLateFinish	datetime	8	23	3	Estimate	
OriginalBudgetLateStart	datetime	8	23	3	Estimate	
OriginalBudgetManHours	float	8	53	0	Estimate	
OriginalBudgetQuantity	float	8	53	0	Estimate	
OriginalBudgetStart	datetime	8	23	3	Estimate	
OriginalBudgetTotalCost	float	8	53	0	Estimate	

OriginalBudgetUnitCost	float	8	53	0	Estimate	
OriginalBudgetUnitOfMeasureUID	uniqueidentifier	16	0	0	Estimate	
PayItemDescription	nvarchar	-1	0	0	Estimate	
PayItemLineNumber	nvarchar	200	0	0	Estimate	
PercentOfQuantity	float	8	53	0	Estimate	
PercentOfTotalCost	float	8	53	0	Estimate	
QuantityRollUpDescription	nvarchar	600	0	0	Estimate	
ReadableWbsCode	nvarchar	200	0	0	Estimate	
RevenueTotal	float	8	53	0	Estimate	
SecondaryMeasurementTypeName	nvarchar	200	0	0	Estimate	
SubjectCostType	nvarchar	100	0	0	Estimate	
TargetCostCategoryName	nvarchar	200	0	0	Estimate	
TotalAdjustmentAmount	float	8	53	0	Estimate	
TotalAdjustmentAmountBilling	float	8	53	0	Estimate	
TotalAdjustmentPercent	float	8	53	0	Estimate	
TotalAdjustmentPercentBilling	float	8	53	0	Estimate	
TotalCostBilling	float	8	53	0	Estimate	
TotalCostPerManHour	float	8	53	0	Estimate	
UnitCostBilling	float	8	53	0	Estimate	
BidMasterJobUID	uniqueidentifier	16	0	0	Estimate	
LastUpdateID	int	4	10	0	Estimate	
IsActive	bit	1	1	0	Report	
CreatedById	bigint	8	19	0	Report	
CreatedDate	datetimeoffset	10	34	7	Report	
ModifiedById	bigint	8	19	0	Report	
ModifiedDate	datetimeoffset	10	34	7	Report	
BondCostWithoutAdjustment	float	8	53	0	Estimate	
PayItemPositionCode	nvarchar	200	0	0	Estimate	
FilterByCBSLevel	int	Null	Null	Null	Estimate	
EstimateCostItemId	BIGINT	NULL	NULL	NULL	Estimate	

Field Descriptions

Name	Description	Example
EstimateCostItemCalculatedValueId	Unique identifier assigned to each record in the table	1617
EstimateCostItemCalculatedValueUF	System generated field, for internal use only	823af344-ca4d-0823-34ce-67bde2130846
EstimateCostItemCalculatedValueUID	Unique identifier for a Cost Item record. Not visible in the interface.	ec614499-750f-4592-b75d-dac50f4e3e66
C_WbsDetailDescription_0	Description of the Cost Items assigned *WBS Code* selection for the first WBS in	BUY MATERIAL

	the Foundation Setup Data Register, Work Breakdown Structures tab. If a WBS exists, the value of this field can be found in the corresponding WBS column in CBS Register, otherwise the value of this field is NULL.	
C_WbsDetailDescription_1	Description of the Cost Items assigned *WBS Code* selection for the second WBS in the Foundation Setup Data Register, Work Breakdown Structures tab. If a WBS exists, the value of this field can be found in the corresponding WBS column in CBS Register, otherwise the value of this field is NULL.	null
C_WbsDetailDescription_2	Description of the Cost Items assigned *WBS Code* selection for the third WBS in the Foundation Setup Data Register, Work Breakdown Structures tab. If a WBS exists, the value of this field can be found in the corresponding WBS column in CBS Register, otherwise the value of this field is NULL.	null
C_WbsDetailDescription_3	Description of the Cost Items assigned *WBS Code* selection for the fourth WBS in the Foundation Setup Data Register, Work Breakdown Structures tab. If a WBS exists, the value of this field can be found in the corresponding WBS column in CBS Register, otherwise the value of this field is NULL.	null
C_WbsDetailDescription_4	Description of the Cost Items assigned *WBS Code* selection for the fifth WBS in the Foundation Setup Data Register, Work Breakdown Structures tab. If a WBS exists, the value of this field can be found in the corresponding WBS column in CBS Register, otherwise the value of this field is NULL.	null
C_WbsDetailDescription_5	Description of the Cost Items assigned *WBS Code* selection for the sixth WBS in the Foundation Setup Data	null

	Register, Work Breakdown Structures tab. If a WBS exists, the value of this field can be found in the corresponding WBS column in CBS Register, otherwise the value of this field is NULL.	
C_WbsDetailDescription_6	Description of the Cost Items assigned *WBS Code* selection for the seventh WBS in the Foundation Setup Data Register, Work Breakdown Structures tab. If a WBS exists, the value of this field can be found in the corresponding WBS column in CBS Register, otherwise the value of this field is NULL.	null
C_WbsDetailDescription_7	Description of the Cost Items assigned *WBS Code* selection for the eighth WBS in the Foundation Setup Data Register, Work Breakdown Structures tab. If a WBS exists, the value of this field can be found in the corresponding WBS column in CBS Register, otherwise the value of this field is NULL.	null
C_WbsDetailDescription_8	Description of the Cost Items assigned *WBS Code* selection for the ninth WBS in the Foundation Setup Data Register, Work Breakdown Structures tab. If a WBS exists, the value of this field can be found in the corresponding WBS column in CBS Register, otherwise the value of this field is NULL.	null
C_WbsDetailDescription_9	Description of the Cost Items assigned *WBS Code* selection for the tenth WBS in the Foundation Setup Data Register, Work Breakdown Structures tab. If a WBS exists, the value of this field can be found in the corresponding WBS column in CBS Register, otherwise the value of this field is NULL.	null
AllocationQuantity	For internal use only	0
AllocationSourceCostItemText	For a Cost Item distribution, the value of this field indicates the CBS Position	null

	code and Description of the Allocation Source Cost Item	
AllocationTotalCost	For internal use only	0
AllowAsBuiltChoice	Value of the *Allow As-Built* field dropdown found in the CBS Register. This value can also be obtained using the Cost Items [AllowAsBuiltChoiceId] field in the CostItems table.	None
AlternateDescription	Value of the Cost Items *Alternate Description* column in CBS Register. This value can also be obtained using the Cost Items [AlternateUID] field in the CostItems table and joining to the Alternates table.	BASE
Awardee	For a Cost Item whose cost source is an awarded to a Quote, this is the *Company* field value as found on the Quote tab of the Cost Item record and the *Awardee* column on the CBS Register. This value can also be obtained using the Cost Items [AwardeeUID] field in the CostItems table and joining to the Quotes table, then using the [ContactUID] field in the Quotes table and joining to the Contacts table and referencing the ContactDescriptor field	null
BenchmarkItemFilterAsBuiltText	Displayed value of the *Items Filter* field in the As-Built group of the Benchmark Settings dialog	null
BenchmarkItemFilterAsEstimatedText	Displayed value of the *Items Filter* field in the As-Estimated group of the Benchmark Settings dialog	null
BenchmarkJobFilterInheritedAsBuiltText	Displayed value of the *Inherited Jobs Filter* field in the As-Built group of the Benchmark Settings dialog	ALL JOBS
BenchmarkJobFilterInheritedAsEstimatedText	Displayed value of the *Inherited Jobs Filter* field in the As-Estimated group of the Benchmark Settings dialog	ALL JOBS
BenchmarkJobFilterOverrideAsBuiltText	Displayed value of the *Override Jobs Filter* field in the As-Built group of the Benchmark Settings dialog	NO OVERRIDE

BenchmarkJobFilterOverrideAsEstimatedText	Displayed value of the *Override Jobs Filter* field in the As-Estimated group of the Benchmark Settings dialog	NO OVERRIDE
BenchmarkLastUpdated	Value of the *Benchmark Last Updated* column in CBS Register	null
BenchmarkManHoursPerUnitAverage	Value of the *Benchmark MH/Unit (average)* column in CBS Register	0
BenchmarkManHoursPerUnitHigh	Value of the *Benchmark MH/Unit (high)* column in CBS Register	0
BenchmarkManHoursPerUnitLow	Value of the *Benchmark MH/Unit (low)* column in CBS Register	0
BenchmarkManHoursPerUnitStdDev	Value of the *Benchmark MH/Unit (std. dev.)* column in CBS Register	0
BenchmarkManHoursPerUnitVariance	Value of the *Benchmark MH/Unit (% variance)* column in CBS Register	0
BenchmarkNumberOfDataPoints	Value of the *Benchmark Data Points* column in CBS Register	0
BenchmarkUnitCostAverage	Value of the *Benchmark Unit Cost (average)* column in CBS Register	0
BenchmarkUnitCostHigh	Value of the *Benchmark Unit Cost (high)* column in CBS Register	0
BenchmarkUnitCostLow	Value of the *Benchmark Unit Cost (low)* column in CBS Register	0
BenchmarkUnitCostStdDev	Value of the *Benchmark Unit Cost (std. dev.)* column in CBS Register	0
BenchmarkUnitCostVariance	Value of the *Benchmark Unit Cost (% variance)* column in CBS Register	0
BenchmarkUnitsPerManHourAverage	Value of the *Benchmark Units/MH (average)* column in CBS Register	0
BenchmarkUnitsPerManHourHigh	Value of the *Benchmark Units/MH (high)* column in CBS Register	0
BenchmarkUnitsPerManHourLow	Value of the *Benchmark Units/MH (low)* column in CBS Register	0
BenchmarkUnitsPerManHourStdDev	Value of the *Benchmark Units/MH (std. dev.)* column in CBS Register	0
BenchmarkUnitsPerManHourVariance	Value of the *Benchmark Units/MH (% variance)* column in CBS Register	0

BenchmarkXAxisField	Value of the *Display Options, X-Axis* selection in the Benchmark Settings dialog	PrimaryQuantity
BenchmarkYAxisField	Value of the *Display Options, Y-Axis* selection in the Benchmark Settings dialog	UnitCost
BillingRateAdjustment	For non-terminal Cost Items, indicates the Total Billing Adjustment amount of all subordinate Cost Items. Not visible in the application.	0
BillingRateMarkup	Value of the *Billing Rate Markup* column in CBS Register	8818.243002896896
BillingRateMarkupPercent	Value of the *Billing Rate Markup %* column in CBS Register	1.697404682340823
EstimateBudgetItemUID	Identifier of the Cost Items Budget Item UID. Not visible in the application	null
CanAllocate	Indicates if a Cost Item can be allocated. Generally a level 1 cost item and various Dependent Cost Items are allocatable. The *Allocate this Items Cost* checkbox will be disabled for a Cost Item that cannot be allocated	false
CanHaveHours	Cost Items that are terminal level items and have at least one duration driven resource employment can contain hours. The value of this field indicates if the Cost Item can have a value for hours.	true
CanSuspend	Certain Cost Items in the application cannot be suspended by the user such as Cost Item Assembly Employments or Cost Allocation items. The value of this field indicates if a Cost Item can be suspended.	true
CurrentBudgetCurrencyUID	Identifier of the Cost Item records assigned *CB-Currency* value from the Currencies table.	58687bb8-8107-4b88-ae04-f236c3050e58
CurrentBudgetManHours	Value of the Cost Items *CB-Man-Hours* field	0
CurrentBudgetQuantity	Value of the Cost Items *CB-Quantity* field. Since quantities are stored in their base values, divide the *CB-Quantity* by the items corresponding Unit	0

	of Measure Factor to obtain the value displayed in the application	
CurrentBudgetTotalCost	Value of the Cost Items *CB-Total Cost* field	0
CurrentBudgetUnitCost	Value of the Cost Items *CB-Unit Cost* field. Since quantities are stored in their base values, multiply the *CB-Unit Cost* by the items corresponding Unit of Measure Factor to obtain the value displayed in the application	0
CurrentBudgetUnitOfMeasureUID	Identifier of the Cost Items *CB-Unit of Measure* in the UnitsOfMeasure table.	c985403d-620f-4af0-96da-3c2df9edac6c
DefaultAccountDescription	Value of the Cost Items *Account Description* column in CBS Register. This value can also be obtained using the Cost Items [DefaultAccountCodeUID] fiel d in the CostItems table and joining to the Accounts table.	Furn and Haul Base Material
DependentSubjectBillingAmount	For Dependent Cost Items, the value of the Cost Items *Total Billing Amount* on the Billing Breakdown tab of the Dependent Cost Item Record and CBS Register	0
DependentSubjectBillingAmountRate	For Dependent Cost Items, the value of the Cost Items *Subject Billing Rate* on the Billing Breakdown tab of the Dependent Cost Item Record and CBS Register	0
DependentSubjectCost	For Dependent Cost Items, the value of the Cost Items total *Subject Cost* on the Cost Breakdown tab of the Dependent Cost Item Record and CBS Register	0
DependentSubjectCostRate	For Dependent Cost Items, the value of the Cost Items *Subject Cost Rate* on the Cost Breakdown tab of the Dependent Cost Item Record and CBS Register	0
DisplayedAssemblyQuantity	Value of the Cost Items *Resource Assembly Quantity* field in CBS Register	0
DisplayedIsAllocationPayItemInherited	Indicates the state of a Cost Items *Allocation distributions inherit Target Pay Item*	true

	Assignment checkbox on the Allocation tab.	
EquipCountQuantity	Value of the Cost Items *Equip Count* field in CBS Register	2
FilterByAssembly	For internal use only	null
FilterByCostItemIsDelta	For internal use only	null
FilterByEmploymentIsDelta	For internal use only	null
FilterByResource	For internal use only	null
FilterByResourceAccount	For internal use only	null
FilterByResourcesWithWastePercentage	Indicates if any of a Cost Items Resource Employments have a Waste Percent applied.	true
FilterByResourceType	For internal use only	null
FilterByScheduleRelation	For internal use only	null
HasAdjustmentValues	Value of the *Cost Adjustment* checkbox field on the CBS Register and is true when Cost Item includes any cost adjustments.	false
HasAdjustmentValuesBilling	Value of the *Billing Adjustments* checkbox field on the CBS Register and is true when Cost Item includes any Billing Rate adjustments.	false
HasExcelLinks	Value of the *Is Linked to Excel* checkbox field on the CBS Register and is true when the Cost Item includes a field value linked to the jobs embedded workbook	false
HasPeriodCountMismatch	For Cost Items with at least one Resource Employment whose Cost Driver is Scheduled Periods, this field indicates the value of the *Period Count Mismatch* checkbox on the CBS Register. It is true when the number of Scheduled Periods is different from the number of periods defined for the resource in the Period Resource Quantities dialog	false
HasResourcePeriods	Value of the *Has Period Resources* checkbox field on the CBS Register and is true when at least one of a Cost Items Resource Employments have a Cost Driver of Scheduled Periods	false
HasScheduleRelations	Indicates if the Cost Item has a schedule relationship	false

	defined in the Schedule datablock of the Cost Item record	
HasSubjectUtilizationFromDependents	For internal use only	false
Include	For internal use only	true
IncludeAllocationTarget	For internal use only	false
IsAllocationDistribution	Indicates if the Cost Item is the distribution of a Cost Item Allocation	false
IsAllocationDistributionSubordinate	Indicates if an allocation distribution is a subordinate item to the Allocation source	false
IsAllocationTarget	Indicates if the Cost Item is a marked as an allocation target in a Cost Item Allocation	false
IsAllocationTypePercentage	For a Cost Item Allocation Source, indicates if the selected state of the *How do you want to determine allocation percentages* group box, found on the Allocation tab of the Cost Item record, is “by Percentage”	false
IsAllocationTypeProportionately	For a Cost Item Allocation Source, indicates if the selected state of the *How do you want to determine allocation percentages* group box, found on the Allocation tab of the Cost Item record, is “proportionally based on”	false
IsAllocationTypeQuantity	For a Cost Item Allocation Source, indicates if the selected state of the *How do you want to determine allocation percentages* group box, found on the Allocation tab of the Cost Item record, is “by Quantity”	true
IsAllocationTypeUnitCost	For a Cost Item Allocation Source, indicates if the selected state of the *How do you want to determine allocation percentages* group box, found on the Allocation tab of the Cost Item record, is “by Unit Cost”	false
IsBenchmarkAllDataPoints	Indicates the state of a Cost Items *Included Historical Data, Auto include all*	true

	matching data points checkbox in the Benchmark Settings dialog	
IsBusinessOverhead	Indicates if the Cost Item is classified as a Business Overhead Cost in the PBS. Set to true if the Cost Items Cost Segment = "Business Overhead"	false
IsCostItemAssemblyEmployment	Indicates if the Cost Item is part of a Cost Item Assembly employment	false
IsCurrentBudgetManHoursDelta	Indicates if there is a difference between the *OB-Man-Hours* field value and the *CB-Man-Hours* field value.	false
IsCurrentBudgetQuantityDelta	Indicates if there is a difference between the *OB-Quantity* field value and the *CB-Quantity* field value.	false
IsCurrentBudgetTotalCostDelta	Indicates if there is a difference between the *OB-Total Cost* field value and the *CB-Total Cost* field value.	false
IsDirectCost	Indicates if the Cost Item is classified as a Direct Cost in the PBS. Set to true if the Cost Items Cost Segment = "Direct Cost"	true
IsJobOverhead	Indicates if the Cost Item is classified as a Job Overhead Cost in the PBS. Set to true if the Cost Items Cost Segment = "Job Overhead"	false
IsOverriddenByAlternate	For Internal use only	false
IsScheduleWBS	Value of the *WBS Element* checkbox field on the CBS Register and Schedule datablock of the Cost Item Record	false
IsSuspendedInQuotes	For Internal use only	false
IsVisible	For Internal use only	null
LaborCostPerManHour	Value of the *Labor Total Cost/Man-Hour* column in CBS Register	30.618900000000004
ManCountQuantity	Value of the Cost Items *Man Count* field in CBS Register	2
Notes	Value of the Cost Items *Notes* field as found on the CBS Register and on the Notes datablock of the Cost Item record	The Haul is 5 miles.

OriginalBudgetActualFinish	Value of the Cost Items Schedule *Actual Finish* Date	null
OriginalBudgetActualStart	Value of the Cost Items Schedule *Actual Start* Date	null
OriginalBudgetCurrencyUID	Identifier of the Cost Item records assigned *OB-Currency* value from the Currencies table.	58687bb8-8107-4b88-ae04-f236c3050e58
OriginalBudgetEarlyFinish	Value of the Cost Items Schedule *Early Finish* Date	null
OriginalBudgetEarlyStart	Value of the Cost Items Schedule *Early Start* Date	null
OriginalBudgetFinish	Value of the Cost Items Schedule *Finish* Date	null
OriginalBudgetLateFinish	Value of the Cost Items Schedule *Late Finish* Date	null
OriginalBudgetLateStart	Value of the Cost Items Schedule *Late Start* Date	null
OriginalBudgetManHours	Value of the Cost Items *OB-Man-Hours* field	0
OriginalBudgetQuantity	Value of the Cost Items *OB-Quantity* field. Since quantities are stored in their base values, divide this value by the items corresponding Unit of Measure Factor to obtain the value displayed in the application	0
OriginalBudgetStart	Value of the Cost Items Schedule *Start* Date	null
OriginalBudgetTotalCost	Value of the Cost Items *OB-Total Cost* field	0
OriginalBudgetUnitCost	Value of the Cost Items *OB-Unit Cost* field. Since quantities are stored in their base values, multiply the *OB-Unit Cost* by the items corresponding Unit of Measure Factor to obtain the value displayed in the application	0
OriginalBudgetUnitOfMeasureUID	Identifier of the Cost Items *OB-Unit of Measure* in the UnitsOfMeasure table.	c985403d-620f-4af0-96da-3c2df9edac6c
PayItemDescription	Value of the Cost Items assigned *Pay Item Description* field as found on the CBS Register and Cost Item record. This value can also be obtained using the Cost Items [PayItemUID] field in the CostItems table and joining to the PayItems table.	Aggregate Base

PayItemLineNumber	Value of the Cost Items assigned *Pay Item Line Number* field as found on the CBS Register and Cost Item record. This value can also be obtained using the Cost Items [PayItemUID] field in the CostItems table and joining to the PayItems table.	40
PercentOfQuantity	For internal use only	0
PercentOfTotalCost	For internal use only	0
QuantityRollUpDescription	Value of the Cost Items *Quantity Roll-Up Description* column in CBS Register. This value can also be obtained using the Cost Items [QuantityRollUpUID] field in the CostItems table and joining to the QuantityRollUps table.	Furnish Aggregate Base
ReadableWbsCode	Value of the CBS Position Code as displayed in the application, when visible. Includes the value of CBS Position Codes that are hidden but necessary to enable sorting in the CBS Register, such as the Dependent Cost Items appearing before Cost Item 1.	1.4.1
RevenueTotal	For Cost Items with a Pay Item assignment, the value of the Cost Items proportional amount of the Pay Items current price.	894059.2990828209
SecondaryMeasurementTypeName	Value of the Measurement Type corresponding to Cost Items assigned Secondary Unit of Measure. Not visible on the Cost Item record.	null
SubjectCostType	For a Dependent Cost Item record, the value of the *Subject Cost based on* dropdown on the Dependent Cost Item Record	NotSpecified
TargetCostCategoryName	For a dependent cost item using custom cost categorization, indicates the description of the selected node in the cost category tree	null
TotalAdjustmentAmount	Value of the *Total Cost Adjustment Amount* column in CBS Register	0

TotalAdjustmentAmountBilling	Value of the *Total Billing Adjustment Amount* column in CBS Register	0
TotalAdjustmentPercent	Value of the *Total Cost Adjustment Percent* column in CBS Register	0
TotalAdjustmentPercentBilling	Value of the *Total Billing Adjustment Percent* column in CBS Register	0
TotalCostBilling	Value of the *Total Billing Amount* column in CBS Register	528331.5384850331
TotalCostPerManHour	Value of the *Total Cost/Man-Hour* column in CBS Register	721.5462437251891
UnitCostBilling	Value of the *Billing Unit Rate* column in CBS Register. Since quantities are stored in their base values, multiply the Unit Cost by the items corresponding Unit of Measure Factor to obtain the value displayed in the application.	0.0000129419079215323 6
BidMasterJobUID	Identifier of the Job record from the Jobs table in the BidMaster database. This field is not unique in this table but is unique to an instance of a Job. Not visible in the application.	6e5bb7dd-bf42-4db1-8393-bd78ed5d3620
LastUpdateID	Field for internal use only	11
IsActive	Indicates if record is active. Please note: records will become inactive if a user un-syncs a job from Estimate application	true
CreatedById	System generated Id, will always represent the system, not actual users. This field is for internal use only.	1
CreatedDate	Date/timestamp record is entered	2022-12-23T19:16:25.9124532Z
ModifiedById	System generated Id, will always represent the system, not actual users. This field is for internal use only.	1
ModifiedDate	Date/timestamp record is modified	2022-12-23T19:16:25.9124532Z
BondCostWithoutAdjustment	The total amount of the job's Prime Bond before any adjustments. The Prime Bond represents the insurance cost for the job and is calculated as a percentage of the	0

	current job's target price. For example, $2.00 per $1,000 of the job's target price.	
PayItemPositionCode	A system generated number based on the order the Pay Items are created by the user. Pay Item Position Codes are created in the Pay Item & Proposal Register. Similar to the CBS Position Code, the Pay Items can be dragged and dropped in the register to update the Pay Item's Position Code.	1.4
FilterByCBSLevel	CBS level filtered by	Null
EstimateCostItemId	Unique identifier for a Cost Item	6574

Sample


```
{
    "EstimateCostItemCalculatedValueId": 1617,
    "EstimateCostItemCalculatedValueUF": "823af344-ca4d-0823-34ce-67bde2130846",
    "EstimateCostItemCalculatedValueUID": "ec614499-750f-4592-b75d-dac50f4e3e66",
    "C_WbsDetailDescription_0": "BUY MATERIAL",
    "C_WbsDetailDescription_1": null,
    "C_WbsDetailDescription_2": null,
    "C_WbsDetailDescription_3": null,
    "C_WbsDetailDescription_4": null,
    "C_WbsDetailDescription_5": null,
    "C_WbsDetailDescription_6": null,
    "C_WbsDetailDescription_7": null,
    "C_WbsDetailDescription_8": null,
    "C_WbsDetailDescription_9": null,
    "AllocationQuantity": 0.0,
    "AllocationSourceCostItemText": null,
    "AllocationTotalCost": 0.0,
    "AllowAsBuiltChoice": "None",
    "AlternateDescription": "BASE",
    "Awardee": null,
    "BenchmarkItemFilterAsBuiltText": null,
    "BenchmarkItemFilterAsEstimatedText": null,
    "BenchmarkJobFilterInheritedAsBuiltText": "ALL JOBS",
    "BenchmarkJobFilterInheritedAsEstimatedText": "ALL JOBS",
    "BenchmarkJobFilterOverrideAsBuiltText": "NO OVERRIDE",
    "BenchmarkJobFilterOverrideAsEstimatedText": "NO OVERRIDE",
    "BenchmarkLastUpdated": null,
    "BenchmarkManHoursPerUnitAverage": 0.0,
    "BenchmarkManHoursPerUnitHigh": 0.0,
    "BenchmarkManHoursPerUnitLow": 0.0,
    "BenchmarkManHoursPerUnitStdDev": 0.0,
    "BenchmarkManHoursPerUnitVariance": 0.0,
```

```
"BenchmarkNumberOfDataPoints": 0,
"BenchmarkUnitCostAverage": 0.0,
"BenchmarkUnitCostHigh": 0.0,
"BenchmarkUnitCostLow": 0.0,
"BenchmarkUnitCostStdDev": 0.0,
"BenchmarkUnitCostVariance": 0.0,
"BenchmarkUnitsPerManHourAverage": 0.0,
"BenchmarkUnitsPerManHourHigh": 0.0,
"BenchmarkUnitsPerManHourLow": 0.0,
"BenchmarkUnitsPerManHourStdDev": 0.0,
"BenchmarkUnitsPerManHourVariance": 0.0,
"BenchmarkXAxisField": "PrimaryQuantity",
"BenchmarkYAxisField": "UnitCost",
"BillingRateAdjustment": 0.0,
"BillingRateMarkup": 8818.2430028968956,
"BillingRateMarkupPercent": 1.6974046823408231,
"EstimateBudgetItemUID": null,
"CanAllocate": false,
"CanHaveHours": true,
"CanSuspend": true,
"CurrentBudgetCurrencyUID": "58687bb8-8107-4b88-ae04-f236c3050e58",
"CurrentBudgetManHours": 0.0,
"CurrentBudgetQuantity": 0.0,
"CurrentBudgetTotalCost": 0.0,
"CurrentBudgetUnitCost": 0.0,
"CurrentBudgetUnitOfMeasureUID": "c985403d-620f-4af0-96da-3c2df9edac6c",
"DefaultAccountDescription": "Furn and Haul Base Material",
"DependentSubjectBillingAmount": 0.0,
"DependentSubjectBillingAmountRate": 0.0,
"DependentSubjectCost": 0.0,
"DependentSubjectCostRate": 0.0,
"DisplayedAssemblyQuantity": 0.0,
"DisplayedIsAllocationPayItemInherited": true,
"EquipCountQuantity": 2.0,
"FilterByAssembly": null,
"FilterByCostItemIsDelta": null,
"FilterByEmploymentIsDelta": null,
"FilterByResource": null,
"FilterByResourceAccount": null,
"FilterByResourcesWithWastePercentage": true,
"FilterByResourceType": null,
"FilterByScheduleRelation": null,
"HasAdjustmentValues": false,
"HasAdjustmentValuesBilling": false,
"HasExcelLinks": false,
"HasPeriodCountMismatch": false,
"HasResourcePeriods": false,
"HasScheduleRelations": false,
"HasSubjectUtilizationFromDependents": false,
"Include": true,
"IncludeAllocationTarget": false,
```

```
"IsAllocationDistribution": false,
"IsAllocationDistributionSubordinate": false,
"IsAllocationTarget": false,
"IsAllocationTypePercentage": false,
"IsAllocationTypeProportionately": false,
"IsAllocationTypeQuantity": true,
"IsAllocationTypeUnitCost": false,
"IsBenchmarkAllDataPoints": true,
"IsBusinessOverhead": false,
"IsCostItemAssemblyEmployment": false,
"IsCurrentBudgetManHoursDelta": false,
"IsCurrentBudgetQuantityDelta": false,
"IsCurrentBudgetTotalCostDelta": false,
"IsDirectCost": true,
"IsJobOverhead": false,
"IsOverriddenByAlternate": false,
"IsScheduleWBS": false,
"IsSuspendedInQuotes": false,
"IsVisible": null,
"LaborCostPerManHour": 30.618900000000004,
"ManCountQuantity": 2.0,
"Notes": "The Haul is 5 miles.",
"OriginalBudgetActualFinish": null,
"OriginalBudgetActualStart": null,
"OriginalBudgetCurrencyUID": "58687bb8-8107-4b88-ae04-f236c3050e58",
"OriginalBudgetEarlyFinish": null,
"OriginalBudgetEarlyStart": null,
"OriginalBudgetFinish": null,
"OriginalBudgetLateFinish": null,
"OriginalBudgetLateStart": null,
"OriginalBudgetManHours": 0.0,
"OriginalBudgetQuantity": 0.0,
"OriginalBudgetStart": null,
"OriginalBudgetTotalCost": 0.0,
"OriginalBudgetUnitCost": 0.0,
"OriginalBudgetUnitOfMeasureUID": "c985403d-620f-4af0-96da-3c2df9edac6c",
"PayItemDescription": "Aggregate Base",
"PayItemLineNumber": "40",
"PercentOfQuantity": 0.0,
"PercentOfTotalCost": 0.0,
"QuantityRollUpDescription": "Furnish Aggregate Base",
"ReadableWbsCode": "1.4.1",
"RevenueTotal": 894059.29908282089,
"SecondaryMeasurementTypeName": null,
"SubjectCostType": "NotSpecified",
"TargetCostCategoryName": null,
"TotalAdjustmentAmount": 0.0,
"TotalAdjustmentAmountBilling": 0.0,
"TotalAdjustmentPercent": 0.0,
"TotalAdjustmentPercentBilling": 0.0,
"TotalCostBilling": 528331.53848503309,
```

```
    "TotalCostPerManHour": 721.54624372518913,
    "UnitCostBilling": 1.2941907921532359E-05,
    "BidMasterJobUID": "6e5bb7dd-bf42-4db1-8393-bd78ed5d3620",
    "LastUpdateID": 11,
    "IsActive": true,
    "CreatedById": 1,
    "CreatedDate": "2022-12-23T19:16:25.9124532Z",
    "ModifiedById": 1,
    "ModifiedDate": "2022-12-23T19:16:25.9124532Z",
    "BondCostWithoutAdjustment": 0.0,
    "PayItemPositionCode": "1.4"
}
```

Data Validation

This data can be validated by viewing Cost Items in the CBS Register or opening a Cost Item Record from the CBS Register

Figure 1: Cost Items in the CBS Register

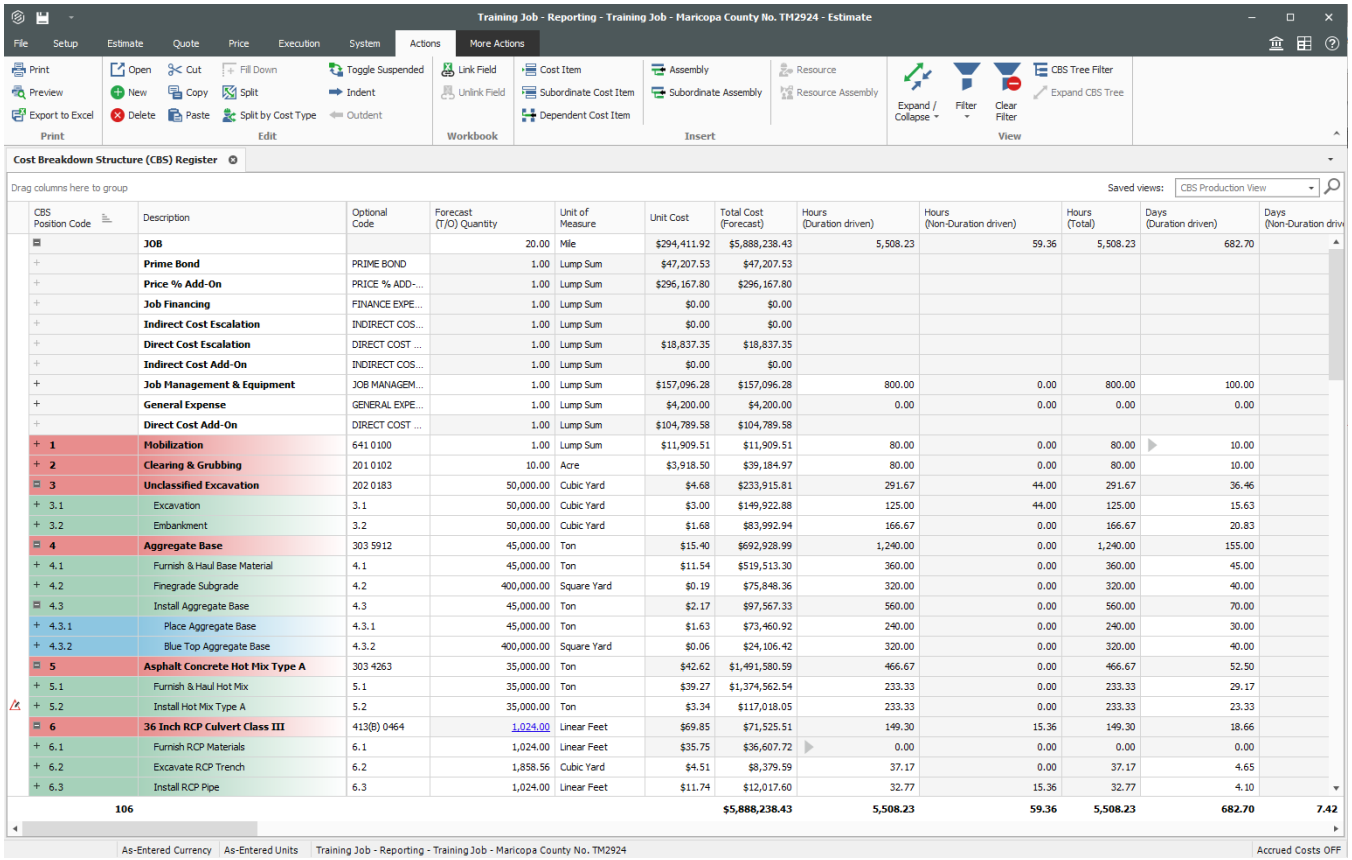
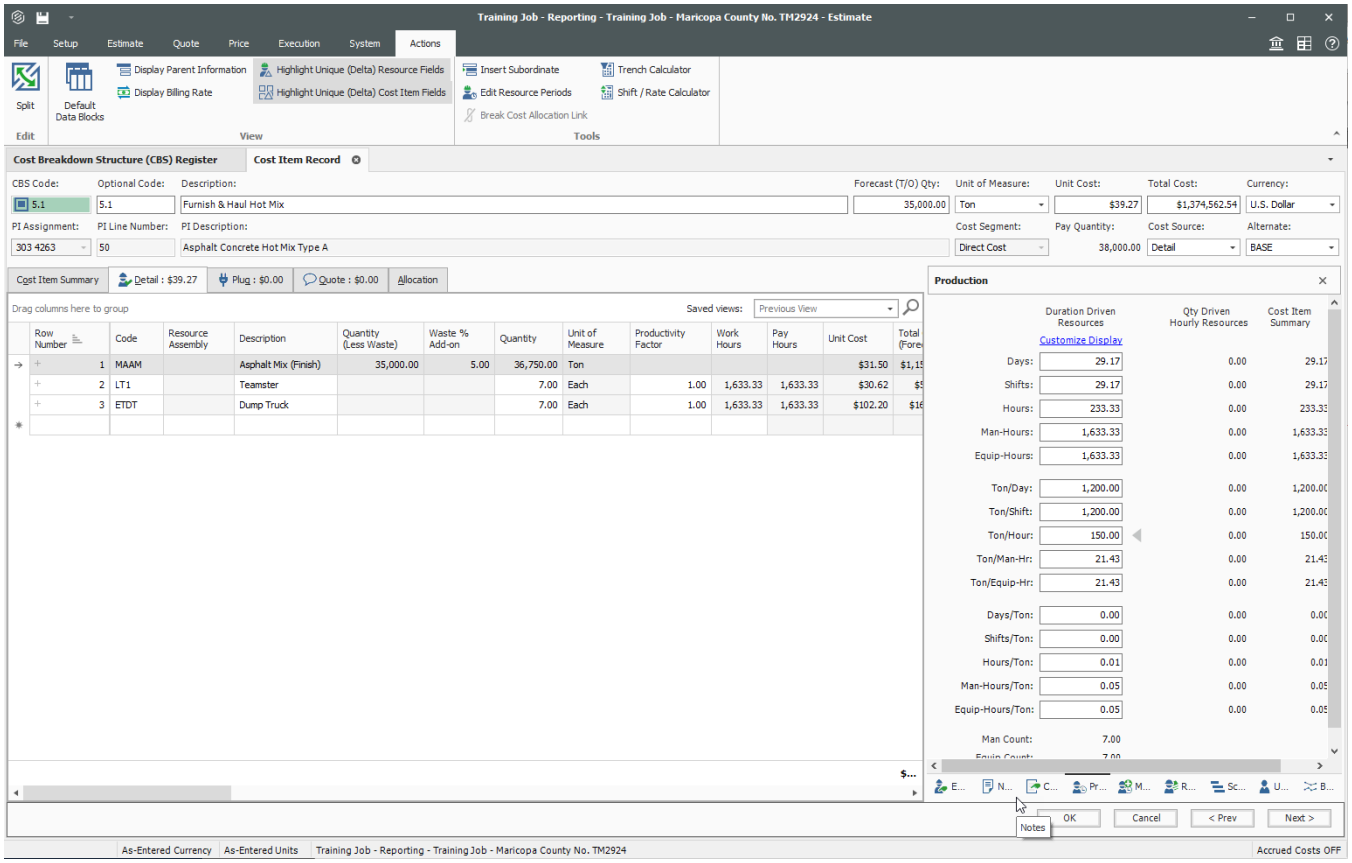


Figure 2: Cost Item Record


Training Job - Reporting - Training Job - Maricopa County No. TM2924 - Estimate
File
Setup
Estimate
Quote
Price
Execution
System
Actions
Split
Default Data Blocks
Display Parent Information
Display Billing Rate
Highlight Unique (Delta) Resource Fields
Highlight Unique (Delta) Cost Item Fields
Insert Subordinate
Edit Resource Periods
Break Cost Allocation Link
Trench Calculator
Shift / Rate Calculator
Edit
View
Tools
Cost Breakdown Structure (CBS) Register
Cost Item Record
CBS Code:
Optional Code:
Description:
Forecast (T/O) Qty:
Unit of Measure:
Unit Cost:
Total Cost:
Currency:
5.1
5.1
Furnish & Haul Hot Mix
35,000.00
Ton
$39.27
$1,374,562.54
U.S. Dollar
PI Assignment:
PI Line Number:
PI Description:
Cost Segment:
Pay Quantity:
Cost Source:
Alternate:
303 4263
50
Asphalt Concrete Hot Mix Type A
Direct Cost
38,000.00
Detail
BASE
Cost Item Summary
Detail : $39.27
Plug : $0.00
Quote : $0.00
Allocation
Drag columns here to group
Saved views:
Previous View
Row Number
Code
Resource Assembly
Description
Quantity (Less Waste)
Waste % Add-on
Quantity
Unit of Measure
Productivity Factor
Work Hours
Pay Hours
Unit Cost
1 MAAM Asphalt Mix (Finish) 35,000.00 5.00 36,750.00 Ton $31.50
2 LT1 Teamster 7.00 Each 1.00 1,633.33 1,633.33 $30.62
3 ETDT Dump Truck 7.00 Each 1.00 1,633.33 1,633.33 $102.20
Production
Duration Driven Resources
Qty Driven Hourly Resources
Cost Item Summary
Customize Display
Days: 29.17 0.00 29.17
Shifts: 29.17 0.00 29.17
Hours: 233.33 0.00 233.33
Man-Hours: 1,633.33 0.00 1,633.33
Equip-Hours: 1,633.33 0.00 1,633.33
Ton/Day: 1,200.00 0.00 1,200.00
Ton/Shift: 1,200.00 0.00 1,200.00
Ton/Hour: 150.00 0.00 150.00
Ton/Man-Hr: 21.43 0.00 21.43
Ton/Equip-Hr: 21.43 0.00 21.43
Days/Ton: 0.00 0.00 0.00
Shifts/Ton: 0.00 0.00 0.00
Hours/Ton: 0.01 0.00 0.01
Man-Hours/Ton: 0.05 0.00 0.05
Equip-Hours/Ton: 0.05 0.00 0.05
Man Count: 7.00
Notes
OK
Cancel
< Prev
Next >
As-Entered Currency
As-Entered Units
Training Job - Reporting - Training Job - Maricopa County No. TM2924
Accrued Costs OFF