Project Controls EXPO
Melbourne, Australia

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Getting the "Value" from Earned Value

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Getting the “Value” from Earned Value

Today’s Presentation

1. **Context**
2. **Producing Robust EV**
3. **Leadership**
4. **Using the Data**

1. CONTEXT

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Context

Why?

- E**arly warning system** for developing project issues.
- Proactive management. Project optimisation.
- Cost and time assurance.

Also…

- Connection between time-cost-scope.
- A vehicle to drive discipline on the project.
- Reference points for changes and performance.
- Objective project analytics… plus much more.

Context

For EVM to have an impact:

1. The data must be **robust** and

2. Project **leadership** must understand it, believe it, and act upon it.

Context

EV in Context (Projects)

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Context

EV in Context (Projects)

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Context

EV in Context (Projects)

Context

EV in Context (Projects)

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2. PRODUCE ROBUST EV

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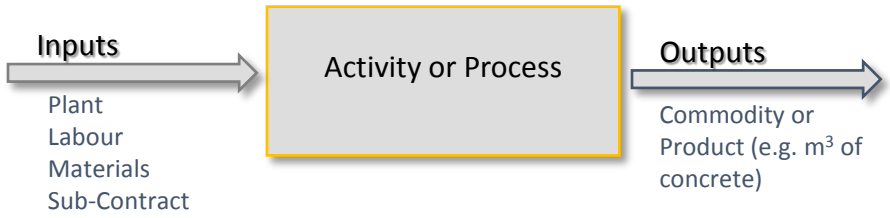
Produce Robust EV

How?

- Commensurate WBS/CBS/OBS. Connect with Estimate.

- Objective measurement of progress (outputs), avoiding “% spent” or “% complete”.



Activity Name	Cost	Hrs	Qty	Dates

Produce Robust EV

How?

- "Appropriate" level of detail – not too detailed, not too high-level

- Lever off information that is "produced anyway" wherever possible (e.g. tracking quantities, updating dates in the construction schedule)

Produce Robust EV

How? - A bit more about objective measures

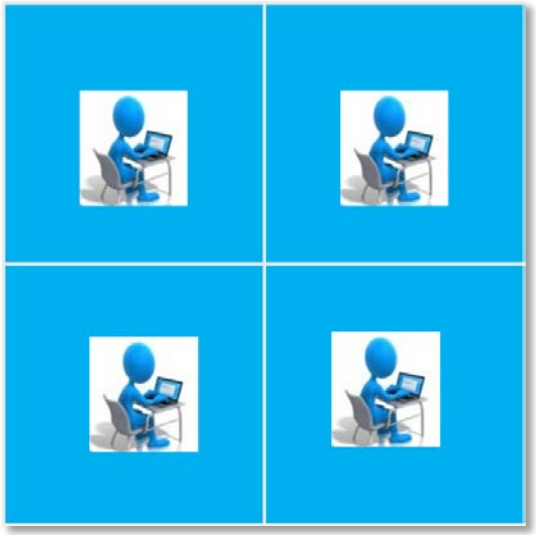
- Often, Control Accounts (Cost Codes) will contain mixed qty types
- Create Activities under Control Accounts

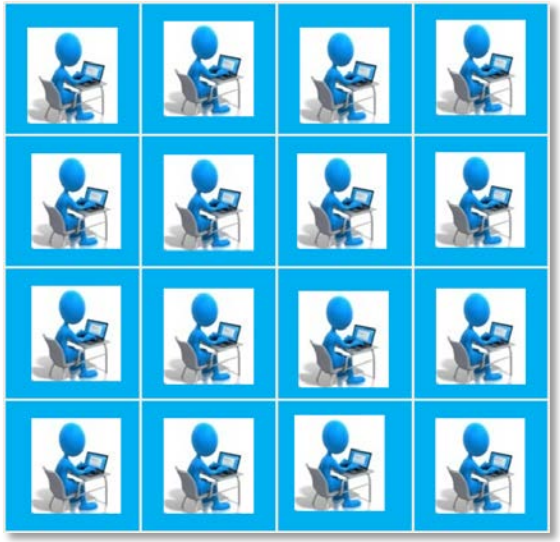
			Budget	Commodity	Unit	Qty	Start	End
CC_0001	**Retaining Walls - East Abutment**							
	Act_01	900mm Bored Piles (10m)	1,500,000	Piles	Nr	150	1/03/2019	15/05/2019
	Act_02	Capping Beam	500,000	Concrete	m3	500	1/05/2019	30/05/2019
	Act_03	Supply Galv Post	600,000	Posts	T	250	1/04/2019	10/04/2019
	Act_04	Supply Precast Panels	475,000	Supply Panels	Nr	1,400	1/04/2019	10/04/2019
	Act_05	Install Precast Panels and associated matls	155,000	Install Panels	Nr	1,400	1/06/2019	30/06/2019
	Act_06	Supply and place backfill	410,000	Fill	m3	8,700	1/07/2019	15/07/2019
	Act_07	Drainage and finishing works	52,000	Pct	%	100	1/07/2019	15/08/2019

Produce Robust EV

How? - A bit more about level of detail

- Sounds boring but it can make or break your system.
- Too high level – mixed qty per cost code
- Too low level (e.g. in P6 – no time to do it properly)





3. LEADERSHIP

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Leadership

- Just reporting? – a self-fulfilling prophecy
- Project **leadership** must understand it, believe it, and act upon it.
- Culture

4. USING THE DATA

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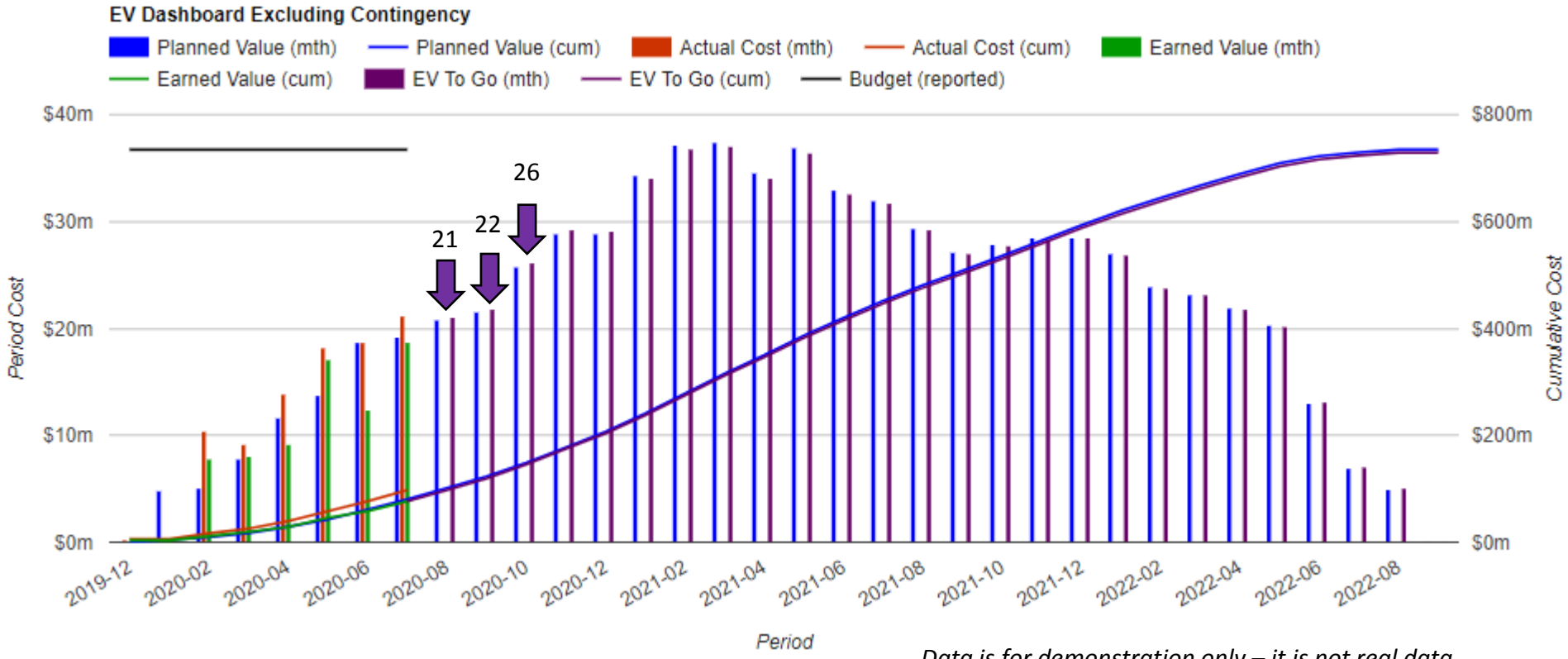
Using the Data

EV forecast



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Using the Data

Comparison of CPI to FFC

Control Account	Title	Budgeted Cost	% Complete of Final Cost	EAC	Earned Value	% Complete of Final EV	CPI	Calc'd EAC	Delta
CC.10115	Management Consultants	4,154,248	27%	4,138,655	807,770	19%	0.71	5,851,054	-1,712,399
CC.10255	ICT Expenses	8,863,297	29%	8,670,034	2,060,717	23%	0.82	10,808,899	-2,138,865
CC.10355	Small Tools	1,024,438	64%	1,025,650	136,592	13%	0.21	4,878,276	-3,852,626
CC.10435	RailCorp Direct Cost Allowances	11,569,866	37%	11,666,099	2,892,466	25%	0.67	17,268,457	-5,602,358
CC.10465	Railway Posession Costs	32,237,640	13%	32,233,828	3,700,881	11%	0.89	36,222,067	-3,988,239
CC.10495	Architecture Pty Ltd	5,343,273	50%	5,264,112	2,230,816	42%	0.85	6,286,204	-1,022,092
CC.12415	Corridor N13 - EarthWorks and C	3,632,405	23%	3,632,404	610,583	17%	0.72	5,045,007	-1,412,603
CC.14815	Proving of services	305,137	39%	4,222,910	45,771	15%	0.03	10,171,233	-5,948,323

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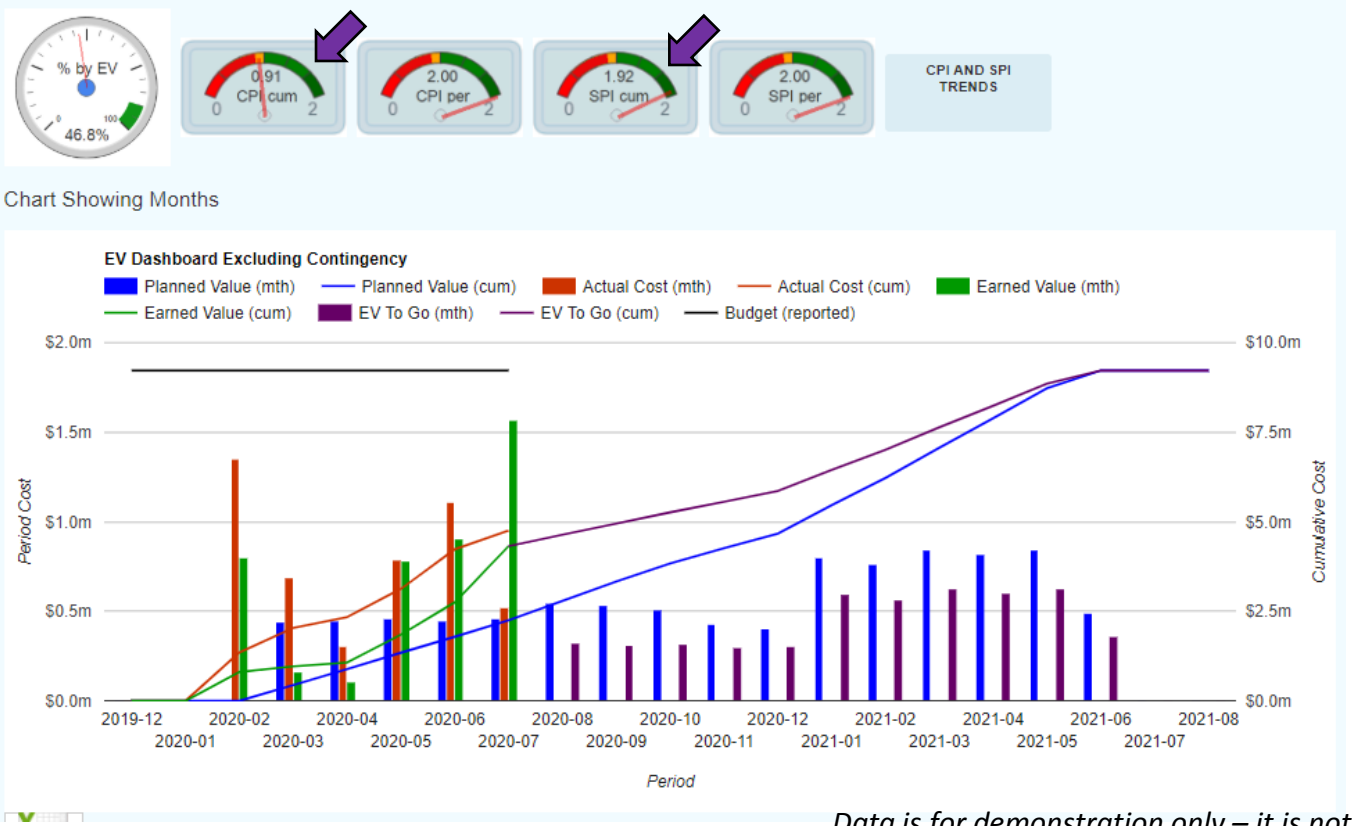
Using the Data

Design performance – Stations (filtered)



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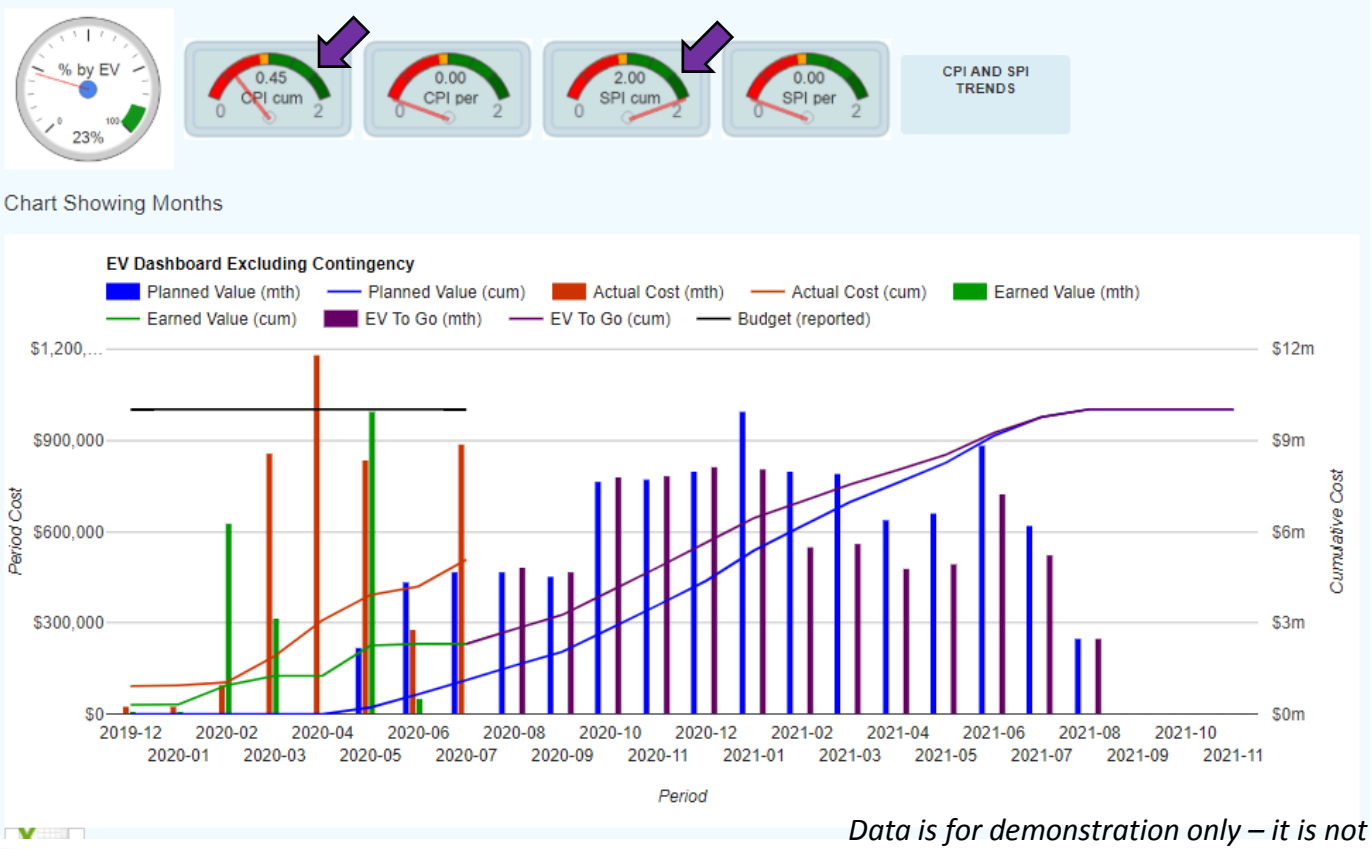
Using the Data

Design performance – Structures (filtered)



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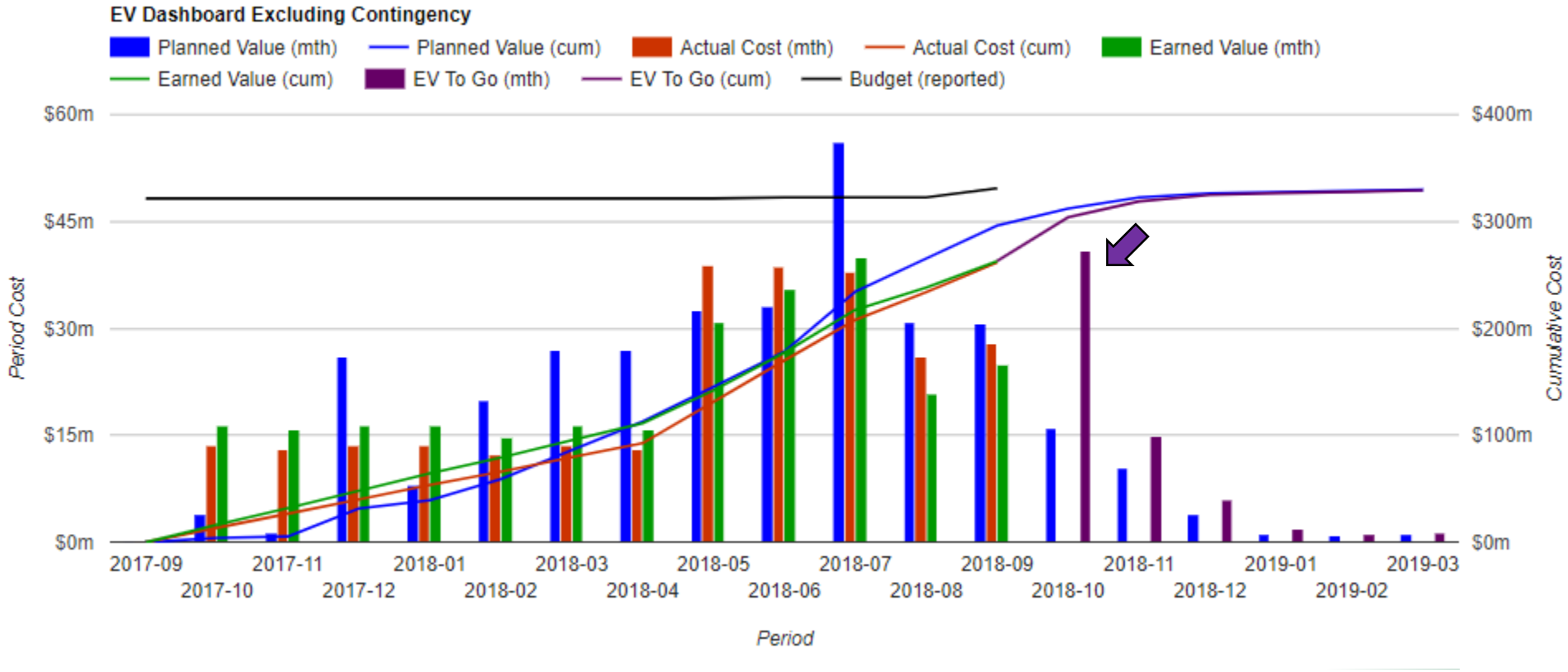
Using the Data

Re-sequencing sub-critical paths



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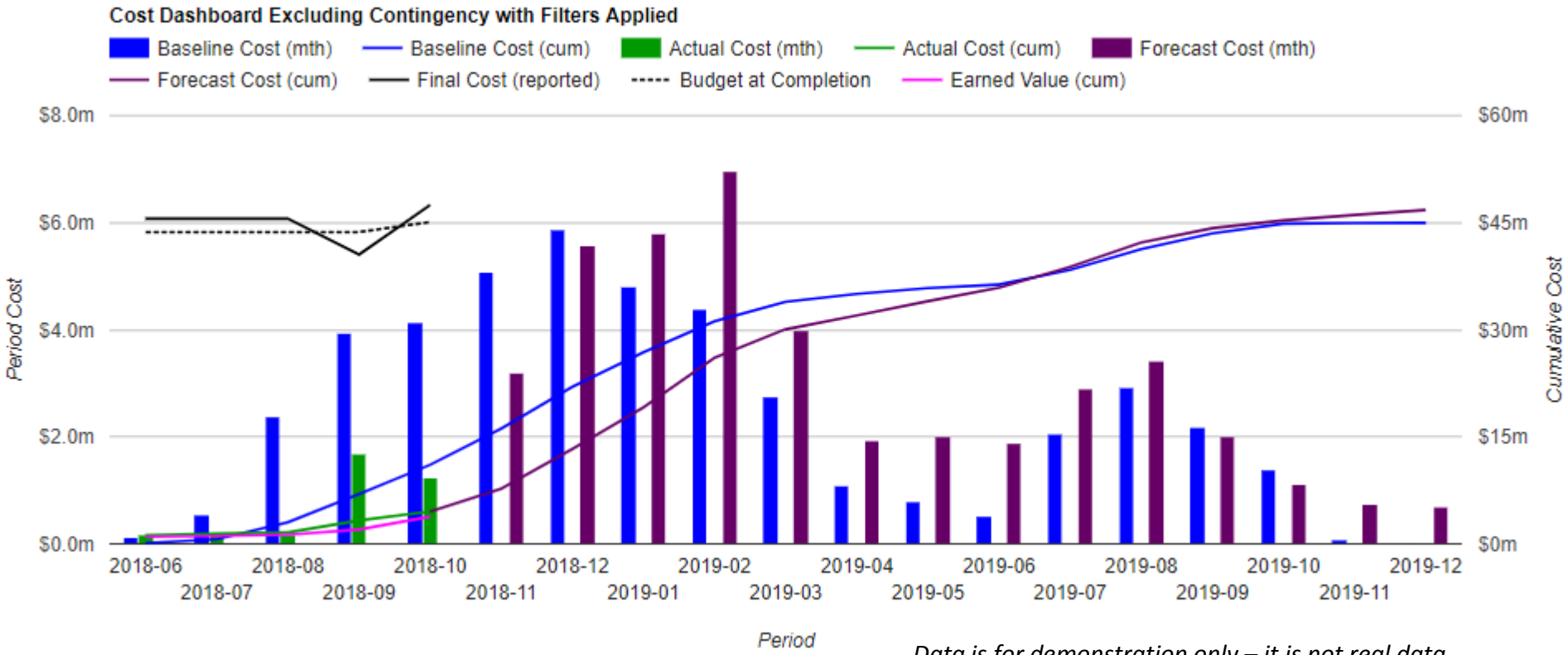
Using the Data

Cost phasing – Area 1 (filtered)



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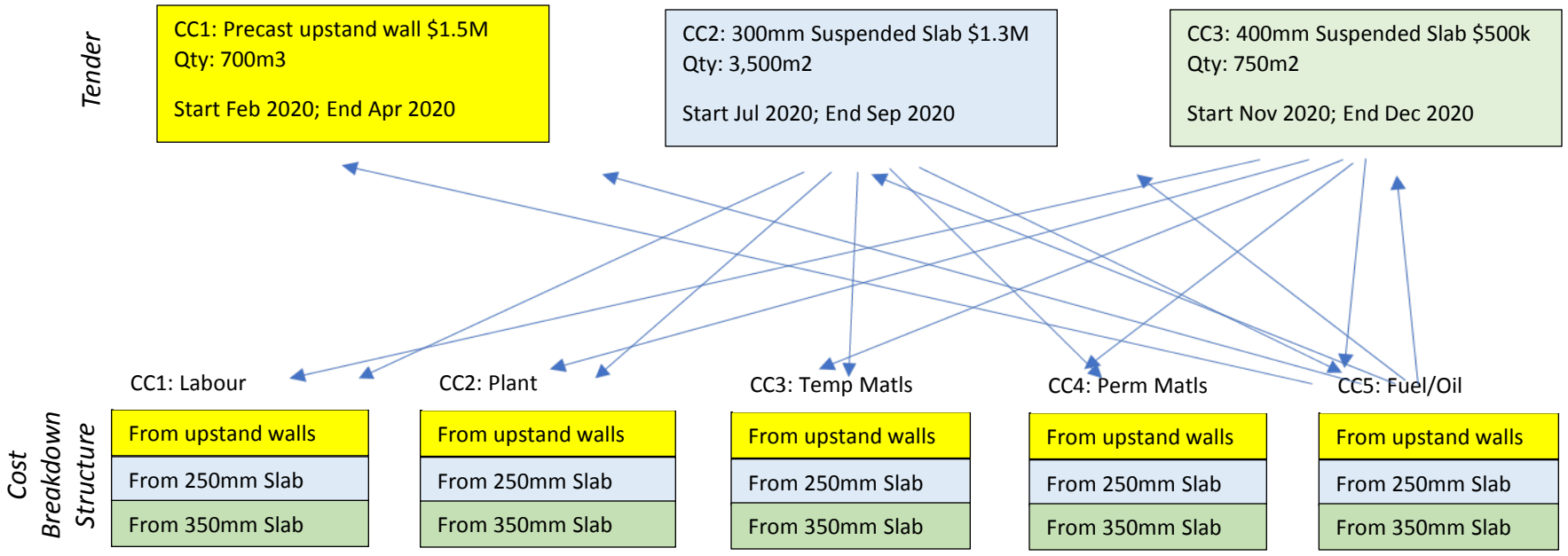
Using the Data

Connecting Time-Cost-Scope (*avoid this situation*)



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