2019 DC Summit

ARNG BUILDER

QA / QC

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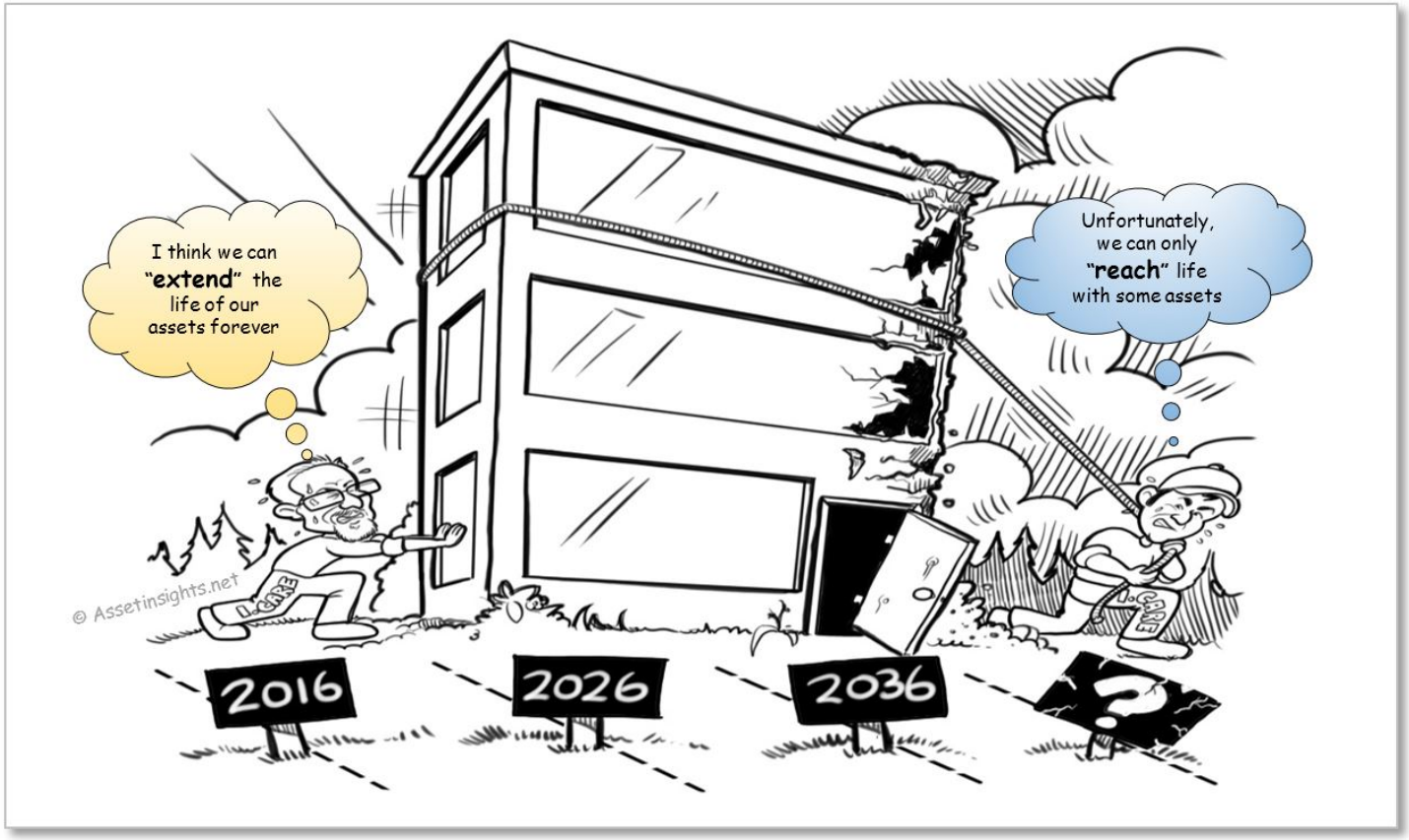
Format

- Ask a question when you have it
- Discussion is encouraged
- Feel free to share your experience

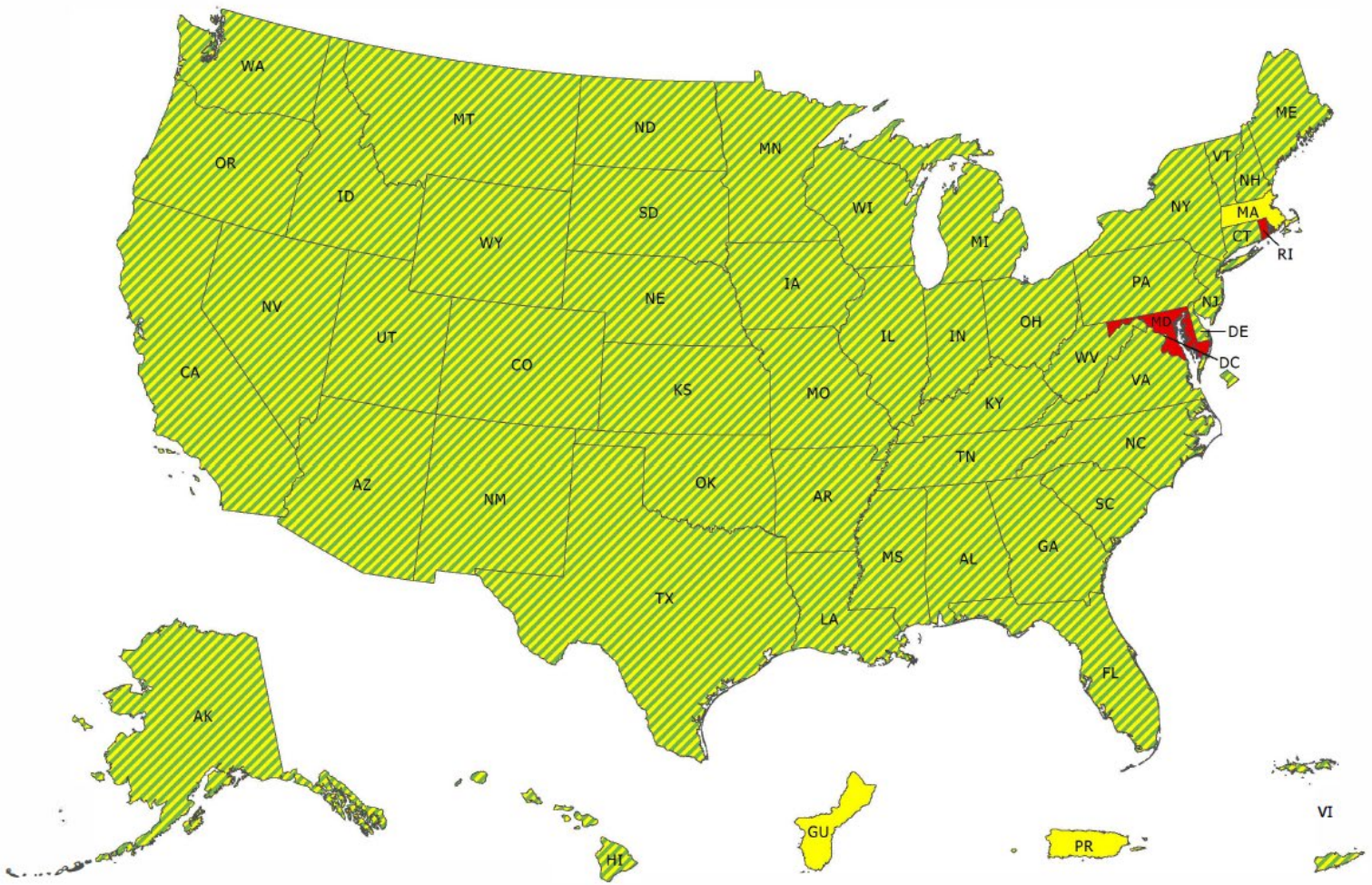
Life Cycle Challenge



ARNG BUILDER Status Report

Generated From BUILDER SMS on 1 July 2019

ARNG-IES



ARNG BUILDER Status as of 1 July 2019

S/T ARNG	Progress by SF			Progress by PRV (Some PRVs are missing ?)			Progress by Site			Progress by Building		
	FCA	Total	%	FCA	Total	%	FCA	Total	%	FCA	Total	%
Totals:	65,891,729	163,636,245	40.27%	$ 22,249,698,277	$ 45,990,330,136	48.4%	777	2,401	32.4%	7,663	20,357	37.6%

All S/T ARNG have awarded BUILDER contracts except for Maryland, and Rhode Island. Massachusetts and Puerto Rico recently awarded contracts. Both expect to begin FCA's in the near future. Maryland is finalizing a contract with the ACOE. Rhode Island is determining funding for this FY to begin its contracting process.

Guam is reporting a planned delay to fund their BUILDER FCAs 100% to optimize travel costs.

Virgin Islands is reporting that the balance of their BUILDER FCAs will be delayed until the entire remaining balance can be completed to optimize travel costs.

Month to Month Progress			
Row Labels	SF	PTD June	
Alabama	2,015	3,985,512	0.1%
Alaska	97,534	1,046,206	9.3%
Arkansas	233,604	1,950,397	12.0%
California	11,353	2,573,272	0.4%
Colorado	92,207	496,055	18.6%
Indiana	1,310,058	2,280,439	57.4%
Kentucky	102,500	1,789,257	5.7%
Mississippi	1,062,745	3,265,261	32.5%
New Hampshire	34,665	207,828	16.7%
Oklahoma	83,118	589,691	14.1%
Pennsylvania	420,860	859,887	48.9%
Utah	2,716	1,373,007	0.2%
Grand Total:	3,453,376	15,385,095	22.4%

QA QC Quarterly Report

Q3FY19 QA QC Report 15 July 2019

BUILDER QC Progress by SF			BUILDER Data DQL Level			
Uploaded	Reviewed	%	OFE	Findings	Deficiences	DQL %
65,891,729	14,935,872	22.7%	93,525	5,098	420	94.55%

QA QC Report Key	
OFE:	Opportunities for Errors
Findings:	Data in need of validation or potential errors
Deficiencies:	Confirmed and Corrected Findings
DQL:	Data Quality Level= (OFE-Findings)/OFE)

	ARNG Foot Print per I&E Corporate Numbers and Map FINAL:				163,500,000	Building SF
					Assume QC Analysis Hours = 0.00019	HRS/SF
					1,920	Hours per Person
	FY18	FY19	FY20	FY21		
Annual SF	40,875,000	40,875,000	40,875,000	40,875,000	NOTE: This makes an unrealistic assumption that 100%	
QC Analysis	7,766	7,766	7,766	7,766	of labor is exclusively devoted to providing QA/QC	
Persons needed:	4.0	4.0	4.0	4.0	analysis of BUILDER data.	
With Auto QA	1.9	1.9	1.9	1.9		

Healthy Data 1

Good Data Rolls Up. This effort provides the opportunity to improve the accuracy of ARNG facilities data! Accurate RPI data is a critical starting point!

Healthy Data 2

NOT ALL DATA ERRORS ARE CREATED EQUAL!

Data errors that impact BUILDER metrics are critical.

"Data Informed Decision Making"

Flawed data YIELDS Flawed Decisions

Critical Data Elements:

- Dates – Building Construction and Component-Section Install Dates
- Quantities – Building GSF versus Component-Section SF, Basic Accuracy
- Uniformat Category/Section – Correct component category, omissions, and section naming for locating in the future
- UoM – LF, SF, EA, KVA
- Accurate DCR – Mitigate risk to occupants or building mission
- Critical Omissions – i.e. HVAC sources with inadequate/missing distribution or vice versa
- Building Level Commenting – Validate blank systems of the required 14 systems

Accurate RPI data 1

HQDA EXORD 159-17 ISO ARMY SUSTAINMENT MANAGEMENT SYSTEM (SMS) IMPLEMENTATION AND TRAINING
Originator: DA WASHINGTON DC
DTG: 011812Z May 17 Precedence: P DAC: General

3.C.2.B. (U/FOUO) ERRORS FOUND DURING SMS INSPECTIONS REGARDING THE REAL PROPERTY UNIQUE IDENTIFIER (RPUID) AND OTHER REAL PROPERTY ERRORS WILL BE CORRECTED IN THE REAL PROPERTY INVENTORY.

Accurate RPI data 2

NGB GUIDANCE SOW:

5.11.4 *Real Property Discrepancy List* – The A-E shall develop a Real Property Discrepancy List outlining any discrepancies between the provided real property data and physically validated facility data (building square footage, number of stories, etc.). Include buildings that are demolished, funded/scheduled to be demolished, funded for major renovation, or undergoing major renovation. Additionally, the S/T ARNG should ensure that any assets that don't meet the criteria in the EXORD for rating by BUILDER are identified and removed from BUILDER. Otherwise the A-E may perform a BUILDER FCA on assets that violate Federal Funding Guidelines or are unnecessary.

Accurate RPI data 3

RPI Data Element	Discrepancy	Recent Total	Assessed
PRV	"0"	69	1
GSF	Unable to Quantify	Resolving Site by Site	
Floors	"Blank"	394	40
RPUID	"Missing"	211	34

Critical Data Elements

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Dates – Building Construction and Component-Section Install Dates

- Obvious – Rarely should Section dates be older than the building
  - Exceptions:
    - ❖ Possible for Equipment Manufactured dates to predate the building
    - ❖ Repurposed equipment
- Do dates match the renovation history in the building level comments?

Quantities:

- Building GSF versus Component-Section SF – Do quantities for slabs, decks, and roofs make sense when compared to the GSF of the building?
- Basic Accuracy – Do they make sense for the building type, size and floor count?

Uniformat Category/Sectioning

- Correct component category?
- Is it in scope?
- Are all expected categories for that component present?
- Is the Section Name adequate for locating that component-section in the future?

UoM – LF, SF, EA, KVA

- Self Explanatory
- Do the quantities and UoM match?

Accurate DCR 1

- Green (-): Does it adequately mitigate risk to occupants or building mission?
- Amber (+) and below: Is the inspection commenting complete? Distress and %? Inspection photo?
- Does the rating matching the severity of the distress?

Accurate DCR 2

Green (-): Does it adequately mitigate risk to building occupants or mission?

The 2019 version of the Army BUILDER Guide addresses the issue of Component Sections approaching end of life where a visual inspection may not be sufficient to accurately rate it to mitigate risk. In those instances where a strict visual inspection would result in a G minus (88), the assessor is given the option to be informed by its age and rate is as amber or amber (+). i.e. Transformers, Breaker Panels, Hot Water Heaters, Boilers, etc. Here's the actual language.

Service life: No distresses present and component is nearing (or past) its service life.

The following comment can be used as an inspection comment for components that have no signs of distresses, are rated either Amber (A) or Amber Plus (A+), and are over 75% through their service life. This negates the need to have 4 parts of an inspection comment. Also, an inspection photo is no longer required. [First Last-AE-Date] - The component is in proper working condition and is showing no signs of distress. The DCR was based on estimated remaining service life.

Accurate DCR 3

The component is in proper working condition and is showing no signs of distress. The DCR was based on estimated remaining service life.

This provides the Facilities Management team the awareness that they have inventory that may need either:

1. Replaced or repaired
2. Warrants a more thorough analysis by those with the expertise and inspection/testing tools to confirm the inventory is performing better than expected
3. Poses nominal risk to run to fail.
4. Or an update to the Catalog Design Life for that Component-Section

Critical Omissions

- Critical Omissions – i.e. HVAC sources with inadequate/missing distribution or vice versa

Building Level Commenting 1

From 3.10.1 of NGB/ARNG FY19 BUILDER Guidance Draft SOW:

Building Level Comments shall be populated for each building with the following information:

1) Missing systems
2) Renovation dates
3) Areas of the building not accessible during the assessment
4) Systems possibly present but are missing due to partial occupancy
5) If drawings were provided. (Does this really have value?)

CERL plans to delete these blank systems so that reports show "NA" for systems that are not present as validated by this commenting.

Building Level Commenting 2

Business Rules for Building Level Comments

From 3.10.1 of NGB/ARNG FY19 BUILDER Guidance Draft SOW:

3.10.1.1 Business Rules for Building Level Comments:
3.10.1.1.1 Missing Systems – Comment when any of the required 14 systems were not present
3.10.1.1.2 Renovation Dates – Comment when renovations are reported or discovered (A-E identified obvious additions/renovations after original construction and confirmed with S/T ARNG personnel).
3.10.1.1.3 Areas of the building not accessible – Comment when certain areas were not accessible
3.10.1.1.4 Systems not in the space occupied by the S/T ARNG – Comment if any of the required 14 systems are omitted when S/T ARNG only occupies a portion of the building.
3.10.1.1.5 Drawings were or were not provided – Comment when drawings were provided or not provided depending on whether or not the majority of buildings had drawings provided. i.e. If most buildings have drawings then comment when not provided. If most buildings do NOT have drawings then comment when provided.


Comments?
Questions?