Entry Form
2017 Annual Awards for Program Excellence
Entry Deadline: Thursday, June 15, 2017, Midnight ET

Each entry must include a completed entry form. Please complete a form for each entry your HFA is submitting. The completed entry form will become the first page of your entry.

This form is a fillable PDF. Type your information into the entry form and save it as a PDF. Please do not write on or scan the entry form. **Questions: Call 202-624-7710 or email awards@ncsha.org.**

Entry Title: Enter your entry's title exactly as you wish it to be published on the NCSHA website and in the awards program.

Category:

Subcategory:

Entry Summary: A 15-word (max) summary of the program, project, or practice you are entering.

HFA:

HFA Staff Contact:

Phone:

Email:

Visual Aids:
Are you mailing to NCSHA 10 copies of any visual aids that cannot be included in your entry PDF?   Yes   No

Payment:
My HFA is mailing a check to NCSHA.

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HFA: Colorado Housing and Finance Authority
Category: Management Innovation - Technology
Entry Name: PAB Tracking

The ability to track Private Activity Bond (PAB) usage is critical for any HFA to serve the mission of affordable housing. Historically at CHFA, accurately tracking PAB usage was primarily a manual and time-consuming process. Potential lags in data collection and entry made it difficult to accurately monitor volume cap in real time. The impact of the lags is heightened by the fact that PAB has a specific expiration and may be issued the same year the volume cap is received. If the cap is not issued, the issuer can elect to carry-forward the cap for two additional years through special filings with Treasury. If the cap is not carried forward or assigned to another eligible issuer, the issuing capacity is lost. This is why it is important to accurately track PAB usage.

To improve upon this critical process, CHFA created a PAB tracking tool that combines a simplified data entry process with a highly interactive and intuitive visual interface that shows a streamlined snapshot of all information decision makers need.

The project grew out of a partnership between the main business stakeholders and IT specialists to come up with a concrete solution to address the shortcomings of the old process. The strong collaboration between parties led to the rapid development and deployment of the PAB tracking dashboard.

Respond to a management challenge opportunity

Prior to the implementation of the PAB tracking tool, PAB usage was tracked on an Excel spreadsheet that contained information from 2006 to present, and required data entry on multiple pages, with formulas that often broke after updating. The spreadsheet also tracked delegations and assignments of PAB from other jurisdictions. In addition, there was often a lag time of up to three months before PAB usages were documented, and was being tracked by an individual outside of the responsible department.

Innovative

Perhaps the greatest innovation of the PAB tracking tool is its simplicity and rapid deployment. The business stakeholders approached IT about partnering to develop an improvement upon the current tracking process in late January 2017. Initially, the team intended to build a new custom software application for PAB tracking, which was determined to be prohibitively expensive. Utilizing an agile, collaborative approach, the team decided to leverage existing off-the-shelf technology tools that CHFA already owned. By pairing the tools (Microsoft Excel and Tableau) with a streamlined data entry process, CHFA was able launch a top-notch tracking tool by mid-March, less than two months after our initial brainstorming meeting.

The primary user interface for the PAB tracking tool is a dashboard that presents all necessary information on PAB sources, uses, and project details on one page (see

Exhibit A). The main feature of the dashboard is the Sources and Uses table. It shows decision makers all of the key information they need to manage PAB cap. The default view shows PAB amounts rolled up at the highest level. It uses an easy-to-read color palette of blue and orange, where blue indicates a positive amount and orange a negative. The table not only shows the allocation and usage amounts, but takes into account expected usage amounts for the current year and next year. It calculates the remaining PAB amounts based on those estimates so decisions on future PAB cap management can be made proactively.

The table also features an interactive drill-down to multiple hierarchy levels so the business user can always pull to the correct level of data. Clicking into the first drill-down shows the allocation year. The next level shows the source type (Delegated or Assigned from another Authority, Direct Allocation, or Carryforward). The final level shows the specific authority for delegations and assignments. This level of granularity allows for the most efficient designation and allocation of PAB cap to projects. Previously, this information was displayed in multiple tables in a spreadsheet, and required an employee to manually manipulate the data. Now the hierarchies and calculations are fully automated, and an employee only needs to enter the basic data in the spreadsheet.

All cells in the table act as filters when clicked by the user, and are context-sensitive to the drill-down level. Clicking on a Use Amount will filter the PAB Use Project Detail table below (see Exhibit B) to only show how that PAB source was utilized. When not filtered, the PAB Use Project Detail table will also display if multiple sources where used for a single project.

Below the PAB Use Project Detail table is the pipeline of estimated future projects, with details on location, expected closing date, and PAB usage expected (Exhibit C). The final chart is a bar chart showing the breakdown of PAB source amounts (Exhibit D).

In addition to the main dashboard, the PAB tracking tool has two additional tabs. One is the Allocation and Assignment tab (Exhibit E), which acts like a CRM tool for tracking status on potential PAB assignments from other entities. Finally, there is a Use by Geographic Area tab (Exhibit F) that shows how PAB cap has been utilized by county and city within the state.

Replicable

The simple and straightforward design of the PAB tracking solution means it could easily be replicated by other HFAs. A key component to our success was end users and technology solution designers working together to determine required information for tracking and decision-making. Our data tracking solution was a single Excel workbook stored on a shared network drive location. We also simplified data entry so that all PAB allocation and usage records have common data points.

We removed all extraneous features from the spreadsheet that could cause confusion or be a failure point, which included formulas and reporting features. We pushed all of this

functionality to our data visualization front-end so it handles consistently. This also allows business users to view and interact with the data without any possibility of corrupting the underlying data, as was possible in the legacy spreadsheet. In CHFA's case, the visualization tool is Tableau, but similar results could be achieved with other technology tools.

Achieve measurable improvements in agency operations

By centralizing the tracking of PAB usage in CHFA's Legal Operations department and creating a new underlying data entry spreadsheet that automatically imports to Tableau, we created a tool that is available for everyone within the organization to view. PAB usage is tracked in real-time, and it takes seconds instead of hours (or months) to display current PAB usage.

"This is by far the best tracking tool we have ever had," said Cris White, CHFA's Executive Director and CEO.

Benefits outweigh costs

The project brought immediate benefits with negligible costs. There were no additional technology costs, and only internal CHFA employees worked on the project.

Effective use of resources

CHFA already owned the technology tools used on the project, and only a few weeks of employee resource time was required from start to finish.

Achieve strategic objectives

Innovative use of Tableau has streamlined PAB tracking and has advanced continuous improvement KPI by creating this process improvement to increase efficiency.

Exhibit A: Rollup table view of PAB cap source amounts by type, with use amounts and expected usage and remaining PAB

CHFA PAB Dashboard

Select Report Year: 2017

	Beginning Amount	Use Amount	Remaining PAB Amount	Expected Use This Year	Remaining After Current Year Expected Use	Expected Use Next Year	Remaining After Next Year Expected Use
rental finance	$311,575,043	($54,035,824)	$257,539,219	($326,050,000)	($68,510,781)	$0	($68,510,781)
any authorized use	$289,441,250	$0	$289,441,250	$0	$289,441,250	$0	$289,441,250
MRB/MCC	$270,341,111	$0	$270,341,111	$0	$270,341,111	$0	$270,341,111
Grand Total	$871,357,404	($54,035,824)	$817,321,580	($326,050,000)	$491,271,580	$0	$491,271,580

Exhibit A: Main source and use table expanded with full drilldown to source and year

CHFA PAB Dashboard

Select Report Year: 2017

				Beginning Amount	Use Amount	Remaining PAB Amount	Expected Use This Year	Remaining After Current Year Expected Use	Expected Use Next Year	Remaining After Next Year Expected Use
rental finance	2014	Delegated	Delegated from the City of Boulder	$5,039,100	($5,039,100)	$0	$0	$0	$0	$0
	2015	Carryforward	Carryforward	$6,535,943	($6,535,943)	$0	$0	$0	$0	$0
	2016	Carryforward	Carryforward	$300,000,000	($42,460,781)	$257,539,219	($326,050,000)	($68,510,781)	$0	($68,510,781)
	Total			$311,575,043	($54,035,824)	$257,539,219	($326,050,000)	($68,510,781)	$0	($68,510,781)
any authorized use	2017	Assignment	Assigned from City of Aurora	$17,867,000	$0	$17,867,000	$0	$17,867,000	$0	$17,867,000
			Assigned from Larimer County	$4,547,000	$0	$4,547,000	$0	$4,547,000	$0	$4,547,000
		Direct Allocation	Direct Allocation from DOLA	$267,027,250	$0	$267,027,250	$0	$267,027,250	$0	$267,027,250
	Total			$289,441,250	$0	$289,441,250	$0	$289,441,250	$0	$289,441,250
MRB/MCC	2014	Carryforward	Carryforward	$152,418,350	$0	$152,418,350	$0	$152,418,350	$0	$152,418,350
	2015	Carryforward	Carryforward	$47,442,861	$0	$47,442,861	$0	$47,442,861	$0	$47,442,861
	2016	Carryforward	Carryforward	$70,479,900	$0	$70,479,900	$0	$70,479,900	$0	$70,479,900
	Total			$270,341,111	$0	$270,341,111	$0	$270,341,111	$0	$270,341,111
Grand Total				$871,357,404	($54,035,824)	$817,321,580	($326,050,000)	$491,271,580	$0	$491,271,580

Exhibit B: PAB Use – Project Details table

PAB Use- Project Details

Name	Source Year	County	City	PAB Delegated Source	Use Amount
Oakridge Crossing (fka Oakridge Senior)	2016	Larimer	Fort Collins	Carryforward	($14,458,824)
Renaissance Downtown Lofts	2016	Denver	Denver	Carryforward	($4,500,000)
Sable Ridge II	2016	Denver	Denver	Carryforward	($8,800,000)
Spark West	2014	Boulder	Boulder	Delegated from the City of Boulder	($5,039,100)
	2015	Boulder	Boulder	Carryforward	($6,535,943)
	2016	Boulder	Boulder	Carryforward	($1,124,957)
Woodlands Apartments	2016	Larimer	Fort Collins	Carryforward	($13,577,000)
Grand Total					($54,035,824)

Exhibit C: Estimated Projects table that shows pipeline of potential projects that will use PAB

Estimated Projects

Name	County	City	Expected Closing	Reimbursement Date	PAB Amount
Alameda View Apartments	Arapahoe	Aurora	7/1/2017	6/23/2016	$25,000,000
Arroyo Village Apartments	Denver	Denver	5/1/2017	6/23/2016	$20,000,000
Copper Stone Apartments	Boulder	Lafayette	11/15/2017	3/21/2017	$38,000,000
Correll Apartments	Boulder	Boulder	7/30/2017	4/11/2017	$5,150,000
East Range Crossing (fka Denver International Apartments)	Denver	Denver	10/1/2017	2/28/2017	$40,000,000
Eaton Street Affordable Housing	Jefferson	Westminster	10/1/2017	2/28/2017	$26,000,000
Holly Park Apartments	Adams	Commerce City	7/30/2017	3/21/2017	$26,000,000
Madison Avenue	Larimer	Loveland	9/1/2017	2/29/2016	$7,400,000
North Range Crossings (fka Foxton Village Apartments)	Adams	Commerce City	5/1/2017	7/11/2016	$33,500,000
Oakshire Commons	Pueblo	Pueblo	4/1/2017	6/23/2016	$7,000,000
Peakview Meadows (fka Peakview Trails)	Weld	Greeley	4/1/2017	6/23/2016	$15,000,000
Pinewood Apartments	Boulder	Boulder	7/30/2017	4/11/2017	$5,100,000
Sierra Vista Apartments	Arapahoe	Denver	8/1/2017	2/14/2017	$32,000,000
Sloans Affordable	Denver	Denver	6/1/2017	8/15/2016	$9,650,000
Valmont Square Apartments	Boulder	Boulder	7/30/2017	4/11/2017	$7,250,000
Vistas at Panorama Pointe (fka Panorama Pointe)	Adams	Westminster	5/1/2017	6/23/2016	$10,000,000
Windmill Ranch	Adams	Brighton	6/15/2017	3/7/2017	$19,000,000
Grand Total					$326,050,000

Exhibit D: PAB Source by type chart

PAB Source

Carryforward	Direct Allocation	Assignment	Delegated
$576,877,054	$267,027,250	$22,414,000	$5,039,100

Exhibit E: Allocation and Assignments tracking tab

Allocation and Assignments

Allocation Year
2017 ▼

Allocation Year	Local Issuers	Issuer Type	MForSF	Day of Requested Date	Status	Notes	Allocation	transfer to CHFA
2017	Adams County	County	Null	Null	Null	$55 million expiring this year. $17 million of it will be used for the Baker School project, and the remainder, ..	5,569,050	
	Arapahoe County	County	MF	March 1, 2017	Null	Assignment for Sierra Vista approved by Commissioners 4.18.17	6,716,800	6,716,800
	Arvada	City	Null	Null	Null	Null	5,758,700	
	Aurora	City	MF	April 1, 2017	Null	Assignment for Alameda View Apartments 4.17.17	17,867,000	17,687,000
	Boulder	City	Null	Null	Null	Null	5,364,550	
	Boulder County	County	Null	Null	Null	Null	3,104,500	

Exhibit F: PAB Use by Geography Tab

PAB use by Geogrpahy

Show County or City Map
County ▼

Select Report Year
☑ (All)
☑ 2016
☑ 2017

$28,035,824
$33,600,436
$63,650,000
$7,700,000
$127,077,000
$9,160,000
$21,784,000
$26,332,620
$7,500,000
Colorado
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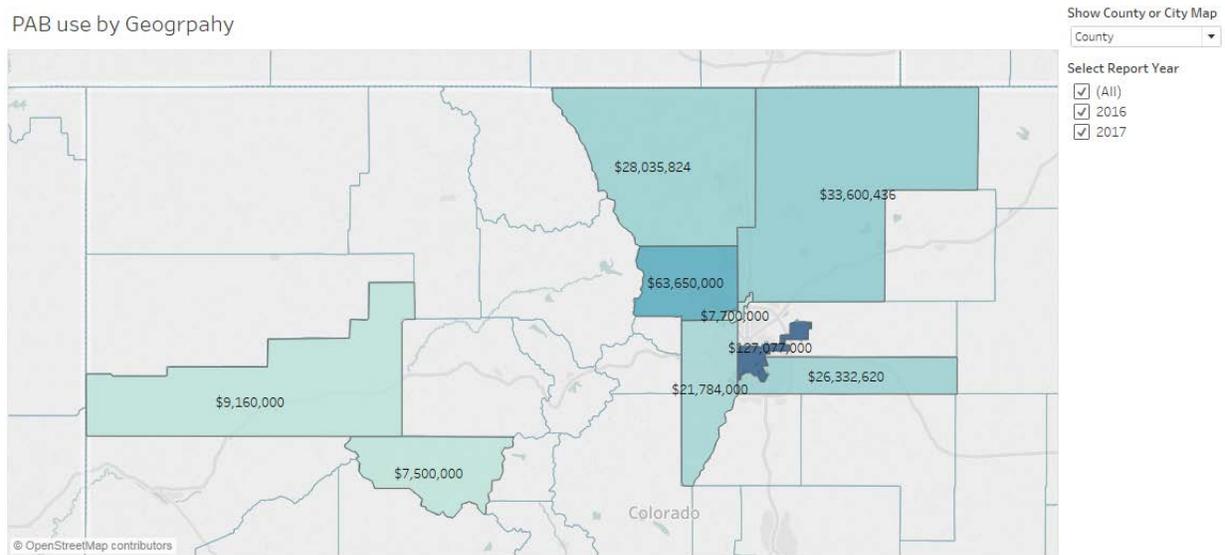
Project Detail

Name	Source Year	County	City	PAB Delegated Source	
Ash Street Apartments	2015	Denver	Denver	Carryforward	$16,912,000
Aspen Country Inn	2013	Pitkin	Aspen	Delegated from El Paso	$5,000,000
	2015	Pitkin	Aspen	Carryforward	$2,500,000
Broadway Lofts	2013	Arapahoe	Englewood	Delegated from Denver	$14,000,000
	2015	Arapahoe	Englewood	Carryforward	$4,832,000
Centennial Park	2013	Boulder	Longmont	Delegated from Denver	$20,000,000
	2015	Boulder	Longmont	Carryforward	$5,000,000
Congress Park	2013	Denver	Denver	Delegated from Denver	$3,500,000
	2015	Denver	Denver	Carryforward	$1,430,000
Crisman Apartments	2013	Boulder	Longmont	Delegated from Denver	$10,000,000
				Delegated from Longmont HA	$4,152,593