

Tailor-Made Information Dominance

Tennessee Housing Development Agency
Management Innovation: Technology

HFA Staff Contact

Stephanie Bounds

sbounds@thda.org



NCSHA 2019 Annual Awards Entry

HFA Name: Tennessee Housing Development Agency
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Background

THDA's IT team is proactive in using technology solutions to improve business processes. Since 2012, THDA has been growing and expanding its in-house software development efforts. In general, agency technical and business staff have agreed that most boxed/vendor-provided applications do not give THDA the flexibility to let software make business processes as efficient as possible, and often require multiple third-party integrations to really work as needed for the agency. Instead, in-house, custom-made, tailored software allows for a standard look and feel, as well as standard development tools that can then be re-used between systems/projects, greatly reducing development time and allowing products to be operational in a much quicker turnaround.

This uniformity across applications in both look and feel, and general functionality and features creates an opportunity for cross-training staff working primarily in specific programs. The familiarity of the interface and processes gives us the opportunity to efficiently expand the practical knowledge and exposure of our staff. This not only benefits our availability and delivery for our customer, but expands the prospects of the individual in promotion and advancement opportunities within the agency.

Behind the Curtain

In planning our in-house systems, we strive to replace multiple methods and procedures to allow for the central administration and control of information. The consistency of processes establishes easier transition, training and maintenance for all involved. Communication between our staff and customers is reliably tracked and available for reference and reporting. This benefits not only the agency, but the customer. Specifically, we have established a creative way to free up staff time by allowing customers to manage their entity's account information and access. We generally assign a 'manager' for each account that has the ability to update and make changes to user access, as well as names, emails and addresses. They have the ability to invite additional users and control their access to the account. Our in-house account administrator maintains oversight and review for consistency and content, but we have found this unique flexibility in our tailor-made software cuts down on phone calls and emails to staff, allowing them to focus on doing their job rather than resetting passwords or activating and deactivating users.

When working with the level and amount of private information we have, security is very important in this type of software. Since THDA builds the software from the ground up, we can plan for security from the very beginning and not have it as an afterthought. We are able to test the software through every phase of development and use secure devops standards. This allows us to be very proactive and not reactive when it comes to security. THDA hosts all of our own systems also allowing us the ability to continue testing once they are in a production environment. This also allows us to move very quickly if we do find a problem or have a patch to be applied without have to worry about third party vendors and weeks or months of delays due to someone else's schedule and determination if there is a problem. The level of teamwork that is required by the security team and development team is high and requires a lot of open communication, but in the end, it makes the customer experience one that is not only productive but secure.

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In some divisions in particular, Multifamily Development, Community Program and Single Family Special Programs, manual processes, spreadsheets and paper applications have been used for years and are now online, allowing the agency to capture much more data than ever before. This enhances reporting and allows for analytics and research to inform future programs, success/failures, etc. Additionally, by having all business processes online, from an application through to completion/payment/closing, provides for a collaborative environment for the external user –the lender, the grant administrator, the non-profit, or the homeowner.

THDA has successfully built and launched enterprise business applications for the following divisions within the agency, their overview and benefits described below.

- Single Family Loan Operations: THELMA, HBEI Manager
- Single Family Special Programs: LOUISE
- Multifamily Development: THOMAS
- Executive: PIMS
- Accounting: ATLAS
- Community Programs: GMS

Additionally, for federally funded, THDA administered, Weatherization Assistance Program software, WAPEZ, THDA strategically partnered with local organizations to build a system used by service providers and participants alike.

On Stage

THELMA – an all-encompassing system from the Loan Originator Portal to in-house underwriting and closing. There is no need for third-party applications for document management that many other HFA's are having to implement in addition to their costly boxed LOS systems. This system provides for end-to-end workflow which allows staff and lenders to monitor the complete flow of a loan submission from beginning to end, allowing for ease of identification and elimination of errors or issues that might otherwise lengthen the process. Overall, the system has improved the efficiency of underwriting time. Prior to THELMA, underwriting reviewed a maximum of five files a day. After THELMA, this has increase to at least seven. Additional features include a built-in calculator for income calculation and the notification function that allows a business to provide guide changes and interest rate information directly to every loan officer, processor or closer that is setup in the system. In fact, the system is so flexible it has allowed us to be ready months in advance for exchanging file delivery formats with partners like Freddie Mac and Fannie Mae.

HBEI Manager – streamlines work tasks for the Homebuyer Education Team. This system houses information about network agencies and counselors, including their contact information, certifications & required continuing education hours. The HBEI Online external portal provides a way for the network members to submit electronic material orders and electronically confirm their customers for monthly payment reports, as well as, submit upcoming class schedules. Additionally, with recent additions and enhancements, THDA can now use this system as their HUD-required Client Management system, allowing THDA HUD Counselors to record demographic and counseling measures and notes that meet HUD Housing Counseling guidelines.

LOUISE – automates processes in the file review process making the process more operative, accurate, and efficient. LOUISE reduces the time it takes to review loans and track production, so much so that the agency was able to reduce the size of the division, re-allocating funds to program dollars rather than salaries and administrative overhead.

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THOMAS – the Tennessee Housing Online Management Application System (THOMAS) is now in its second year. The system has increased efficiency with an internal dashboard for both Competitive Low Income Housing Tax Credits (LIHTC) and Multifamily Tax-Exempt Bond Authority (MTBA) programs. Previously, allocation coordinators relied on a CD-ROM of hard copy attachments to perform file reviews. The time spent uploading the disk and collecting replacement attachments through email made file reviews a tedious process and created limited accessibility to all the necessary information.

As a result of THOMAS, the entire application and the result of subsequent review cycles can be found in the portal. The entire team has read only privileges to review all document submissions, application information, results of THDA reviews, financial feasibility reviews, and application notes all in one place. Application coordinators are able to work more efficiently and spend more time on critical analysis of market studies, appraisals, capital needs assessments and cash flow analysis for each development.

In the first year of THOMAS, the automated ranking feature for the competitive LIHTC was able to produce the ranking in minutes after the final review notice process with 100% accuracy rather than a two day manual excel process.

PIMS – provides consistency in access to commonly-required supporting documentation for customers that expect to apply for multiple opportunities across agency divisions. Within PIMS, we have established threshold requirements, which must be submitted, reviewed and accepted prior to the customer accessing an electronic application for funding through THDA. This allows our staff to review and establish general acceptance criteria, which may not previously have been identified until post-submission of application.

ATLAS – allows for large batches of payments from multiple THDA business units to process through one central application used by the Accounts Payable Team. It has helped the Accounts Payable Team by notifying other THDA divisions if vendors are setup prior to payment processing and by reducing the amount of time Accounts Payable spends on payment reconciliations. Similarly, it has made the payment review and approval process for business units easier. The built-in reports make it easy to review and track what was submitted, who requested payment, and who approved each payment.

GMS - reduces the time required to fill out and turn in grant applications by grant seekers. In many cases, the grant administrators doing the actual work on the grant application can be up to 4 hours away from the grantee's physical location. With the old process, the administrator would have to drive to get original signatures, sometime multiple times during the process from the grantee. With the convenience of electronic signatures that burden was completely removed.

For internal THDA staff, the system eliminates the need for physically looking through 100's of pages of printed documentation for a document to easy access with in-screen navigation. The application scoring criteria is included in the business logic, as well, prepopulating much of the scoring and greatly reducing the time needed to score an application. This also improves accuracy and consistency in the scoring process. Lastly, it makes it possible for more than one person to work on an application at a time. This greatly reduces the total time needed to score an entire body of applications.

WAPez – a centralized, end-to-end system allows for THDA to have greater insight into the implementation of Weatherization services across the state. THDA can track applications, job statuses and provide technical assistance at any time. WAPez has increased our Weatherization capacity as a state and has led to local administrators saving time and increasing production

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Screenshots

LOUISE – Internal Dashboard

Thursday, March 29, 2018 11:04 AM Welcome 11/04/08 user

Tennessee Housing Development Agency THDA SP Management Portal

UNDERWRITER | DOCUMENTS | UPLOADS | NOTES | STATUS HISTORY

My Applications

Search

Program	Assistance Type	Loan #	Applicant	Street	Date Submitted	Current Status	Days Old	Action
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5 Items per page No items to display

Submitted for Underwriting

Program	Assistance Type	Application Num...	Applicant	Street	Date Submitted	Status	Action
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THOMAS -Internal Management Dashboard

The screenshot shows the 'Application Manager Review' section of the THOMAS system. It features a table with columns for Year, Round, Application #, Project Name, County, Date Submitted, Assigned, Project Status, THDA Review Status, Access Requests, and Appeal Requested. The table lists several applications from 2019, including 'Walnut Village Apartments' and 'Clear Springs'. Each row includes a 'Withdraw or Deny' button.

Year	Round	Application #	Project Name	County	Date Submitted	Assigned	Project Status	THDA Review Status	Access Requests	Appeal Requested
2019	2019 Firm MTBA/Noncompetitive 4%	19-202	Walnut Village Apartments	Putnam		Terry Montgomery	Evaluation Notice (Editing)	Evaluation Notice Sent	No	
2019	2019 Firm MTBA/Noncompetitive 4%	19-201	Clear Springs	Knox	1/28/2019 3:04:02 PM	Joe Bethel	Initial App (Submitted)	Coordinator Initial Review	No	
2019	2019 Competitive 9%	19-018	Martha Dandridge Senior Living				Initial App (Editing)	Awaiting Submission	No	
2019	2019 Competitive 9%	19-017	Wixley Fine Ridge				Initial App (Editing)	Awaiting Submission	No	
2019	2019 Competitive 9%	19-016	Bell Street Flats	Knox			Initial App (Editing)	Awaiting Submission	No	
2019	2019 Competitive 9%	19-015	Willows of Athens				Initial App (Editing)	Awaiting Submission	No	
2019	2019 Competitive 9%	19-014	326 Flats	Davidson			Initial App (Editing)	Awaiting Submission	No	
2019	2019 Competitive 9%	19-013	Hunter Hill Apartments	Hardin			Initial App (Editing)	Awaiting Submission	No	
2019	2019 Competitive 9%	19-012	The Flats at Mooreland	Robertson			Initial App (Editing)	Awaiting Submission	No	

THOMAS - External Landing Page

The screenshot shows the 'THDA Messages' section of the THOMAS system. It includes a list of messages regarding bond authority and the 2019-2020 THOMAS Manual. Below the messages is a table with columns for Role, Application Number, Project Name, Round, Project Status, and Access Requests. The table lists several applications, including 'Foothill Ridge Apartments' and 'Campbell Way Apartments'.

Role	Application Number	Project Name	Round	Project Status	Access Requests
Consultant	19-931	Foothill Ridge Apartments	2019 Exchange Round	Carryover (Submitted)	
Construction	19-927	Campbell Way Apartments	2019 Exchange Round	Carryover (Submitted)	
Consultant	19-925	Pickens Way Apartments	2019 Exchange Round	Carryover (Submitted)	
Construction	19-919	Spring Johnson Circle	2019 Exchange Round	Carryover (Submitted)	
Consultant	19-918	Gatview Ridge Apartments	2019 Exchange Round	Carryover (Submitted)	
Construction	19-917	Boscoel Hill	2019 Exchange Round	Carryover (Submitted)	

THOMAS – Internal Ranking – Competitive LIHTC

The screenshot shows the 'Internal Ranking – Competitive LIHTC' section of the THOMAS system. It includes a table with columns for Application Number, Previous TN #, Development Name, County, New, Acq, Rehab, Adap, Reuse, LIHTC Request, 979 SQ Ft, Tie Breaker, THDA Score, IIRN, IUP, PHA, Preservation, OCT/CRP, Rural, QCT, and General Pool. The table lists various applications, including '26th & Clarksville Phase III (TN SILVER)' and 'Pickens Way Apartments'.

Application Number	Previous TN #	Development Name	County	New	Acq	Rehab	Adap	Reuse	LIHTC Request	979 SQ Ft	Tie Breaker	THDA Score	IIRN	IUP	PHA	Preservation	OCT/CRP	Rural	QCT	General Pool
19-002		26th & Clarksville Phase III (TN SILVER)	Davidson	✓					\$1,096,020.24	31,272.00	\$39.05	78.6143	✓							✓
19-925		Pickens Way Apartments	Sevier	✓					\$1,074,000.00	117,400.00	\$9.15	100.0000		✓						✓
19-006		Renaissance at Steele	Shelby			✓			\$1,100,000.00	110,556.00	\$7,534.25	99.0000		✓						✓
19-917		Boscoel Hill	Davidson			✓			\$1,100,000.00	108,368.00	\$24,444.44	97.6143			✓					✓
19-919		Spring Johnson Circle	Williamson			✓			\$330,000.00	51,944.00	\$5,322.58	53.6803			✓					✓
19-007		Five Points Phase 4	Knox	✓					\$1,100,000.00	94,588.00	\$11.63	94.1901		✓						✓
19-920	93-040	Blue Ridge Landing (Chilhowee Apartments)	Polk			✓			\$677,495.00	35,952.00	\$14,114.48	89.2373			✓					✓
19-921	92-015	Stevenson Square (Meigs Heights)	Meigs			✓			\$259,797.00	19,200.00	\$14,991.54	89.1236			✓					✓
19-929	88-052, 89-140	Rhyan Ridge Apartments	Rickett			✓			\$847,973.00	55,604.00	\$12,470.19	88.1390			✓					✓
19-028	92-016	Pleasant Valley Apartments	Moore			✓			\$278,423.00	22,222.00	\$8,701.03	89.1525			✓					✓
19-029	90-056	Stage Road Cannon Manor	Cannon			✓			\$308,316.00	29,389.00	\$7,340.86	89.1387			✓					✓
19-011		Livingston Apartments	Chertan			✓			\$339,133.00	28,957.00	\$8,478.33	84.6897			✓					✓
19-926		Forest Cove	Sevier	✓					\$1,090,884.00	134,180.00	\$8.13	100.0000								✓

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ATLAS

Thursday, March 29, 2019 1:03 PM THDA\Nucsa

Tennessee Housing Development Agency THDA Accounting Transactions and Loan Administration System (ATLAS)

[Home](#) > [Historical Data](#)

Historical Data Parameters

Select system: THELMA From: 03/01/2019 To: 03/06/2019

Select batch #: 2019-03-04 - Batch 136 [View Historical Data](#)

Historical Data Results

14 of 14918 Find | Next

3/28/2019

THELMA - AP Report

Payee	Funding Source	Loan Number	Request Date	Request Type	Request Amount
VMLS		1000010961	2/27/2019	DIS - Surplus	\$ 1,953.36
			2/27/2019	DIS - Surplus	\$ 1,953.36
			2/27/2019	DIS - Surplus	\$ 1,953.36
			2/27/2019	DIS - Surplus	\$ 1,953.36
			2/27/2019	DIS - Surplus	\$ 1,953.36
			2/27/2019	DIS - Surplus	\$ 1,953.36
			2/27/2019	DIS - Surplus	\$ 1,953.36
			2/27/2019	DIS - Surplus	\$ 1,953.36
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			2/27/2019	DIS - Surplus	\$ 1,953.36
			2/27/2019	DIS - Surplus	\$ 1,953.36

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GMS – Internal Program Screen

The screenshot displays the 'Grants Management System' interface. The top navigation bar includes 'Home', 'Programs', and 'Admin'. The main content area is titled 'Threshold Review' and contains a table with the following data:

Applicant	Status	Score	Actions
Appalachia Service Project	Funded	Yes	Edit
Carter County	Funded	Yes	Edit
City of Covington	Funded	Yes	Edit
City of Jellico	Funded	Yes	Edit
City of Lafayette	Funded	Yes	Edit
City of Trenton	Funded	Yes	Edit
City of Tullahoma	Funded	Yes	Edit

Below the 'Threshold Review' table is a 'Scoring Review' table with the following data:

Applicant	Status
Appalachia Service Project	Funded
Carter County	Funded
City of Covington	Funded
City of Jellico	Funded
City of Lafayette	Funded
City of Trenton	Funded
City of Tullahoma	Funded
Cleveland-Bradley Housing Corporation	Funded
Frank Small RTA	Funded

GMS – External User Management Screen

The screenshot displays the 'Grants Management System' interface for user management. It features two main sections:

Invite New User: Includes a dropdown menu for 'Type' (with the option 'Please Choose A Role Type'), an 'Email' input field, and a 'Send' button.

Manage Existing Users: Contains a table with the following data:

Program Name	Name (FN, LN)	Email	Entity	Role	Status	Actions
HOME 2019	Addison Benzchavel	ABenzchavel@thda.org	Test Business 2	Program Manager	Active	Edit, Reset PW
HOME 2019	Test ProgramAdministrator	TestProgramAdministrator@thda.org	Test Business 2		Active	Edit, Reset PW
HOME 2019	Test ProgramManager	TestProgramManager@thda.org	Test Business 2	Program Manager	Active	Edit, Reset PW
HOME 2019	Test ProgramUser	TestProgramUser@thda.org	Test Business 2	Program User	Active	Edit, Reset PW