User Manual

PPM Version 2.0

FHA Connection Multi-Factor Authentication

U.S. Department of Housing and Urban Development

August 2023

Solution Information

	Information
Solution Name	FHA Connection Multi-Factor Authentication
Solution Acronym	FHA Connection (FHAC/F17C)
Version/Release Number	Version 1.0

Document History

Version No.	Date	Author	Revision Description
1.0	08/02/2023	Pyramid Systems, Inc.	Original Draft

Content

1. Solution Summary

FHA Connection Multi-Factor Authentication (MFA) is an added layer of security used to verify an end user's identity when they sign into the FHA Connection system. Implementing the MFA solution by Okta, Inc., reduces the risks of compromised passwords. This solution enables greater security without compromising the user experience for Single Family Housing lenders.

1.1 Features

1.1.1. Flexible Login

FHA Connection MFA enables users to sign in with either a user ID/password or PIV/CAC card. Users logging in with a user ID/password will be prompted for a 2nd authentication factor. The PIV/CAC card login is only available for HUD employees and contractors that were provided PIV cards by HUD.

1.1.2. Multi-Factor Authentication Options

FHA Connection MFA provides users with various access verification options. These include:

- One-time verification code sent to phone via text message (SMS)
- One-time verification code sent to phone via phone call (note: this option also works with a land line if no cell/smart phone is available)
- Using the Okta Verify phone application (iPhone or Android)
- Using the Google Authentication phone application (iPhone or Android)

In addition, users are prompted to set up a security question. This security question is not used for daily authentication, but it is used if needed to unlock a user's Okta account. For the security question, users can choose a security question from a list of 19 options or create their own security question.

1.2 Configuration

Users will continue to use the same login page as a starting point to enter the FHAC applications. There are no underlying changes to the applications. This only affects the login process to FHAC.

1.3 Data Flows

Not applicable.

1.4 Contingencies and Alternate Modes of Operation

During a pilot of the MFA capability, an alternate URL will be provided to login using the MFA capabilities. If issues arise during the pilot, the original FHAC sign-in URL can be used.

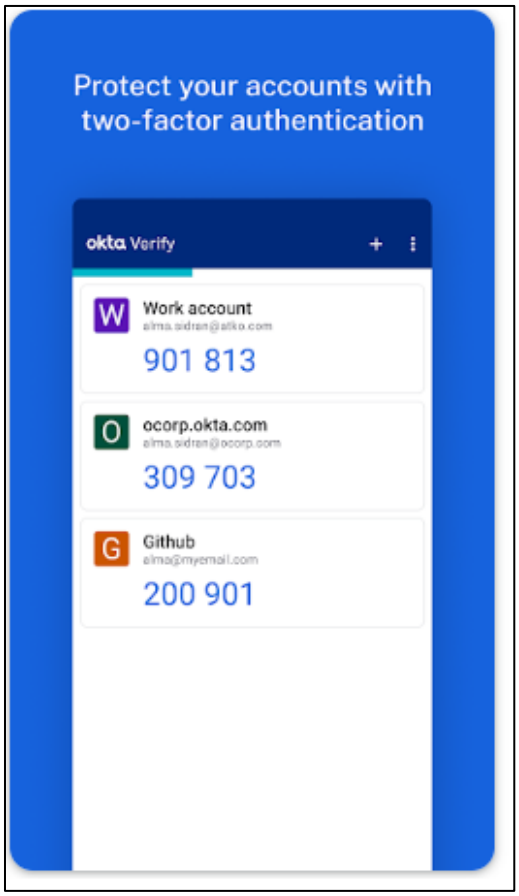
2. Getting Started

2.1 Software Version

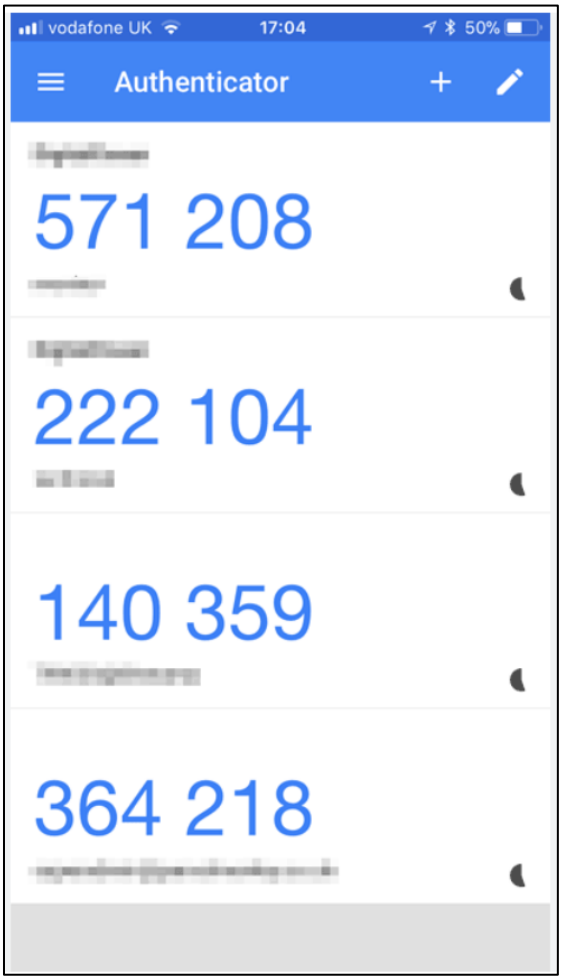
As preparation for using the Multi-Factor Authentication (MFA), FHAC users can download one of the free smart phone “authenticator” applications via the Apple App Store (iPhone) or the Google Play Store (Android).

If you are already using one of these two applications for other sites to authenticate, you can just use your existing application by adding another site to the authentication app by clicking the + sign and adding another account.

Okta Verify – This application is provided by Okta Inc. After setting up your account, the Okta Verify application will give you a verification number for your account that you will use to authenticate. This number changes every 30 seconds. If you sign in to FHAC with your user ID/password, you will be prompted to enter this rolling number.



Google Authenticator – The Google authenticator application works similarly to the Okta Verify application. If you choose this authenticator to use for FHAC, open the app and look for the HUD FHAC account (see setup later in this document), and enter your verification number.



2.2 Solution Requirements

HUD Employees and contractors that have a HUD PIV card can use the PIV card to login to FHAC. After the initial setup, additional authentication is not required when using the PIV card (and PIV card PIN).

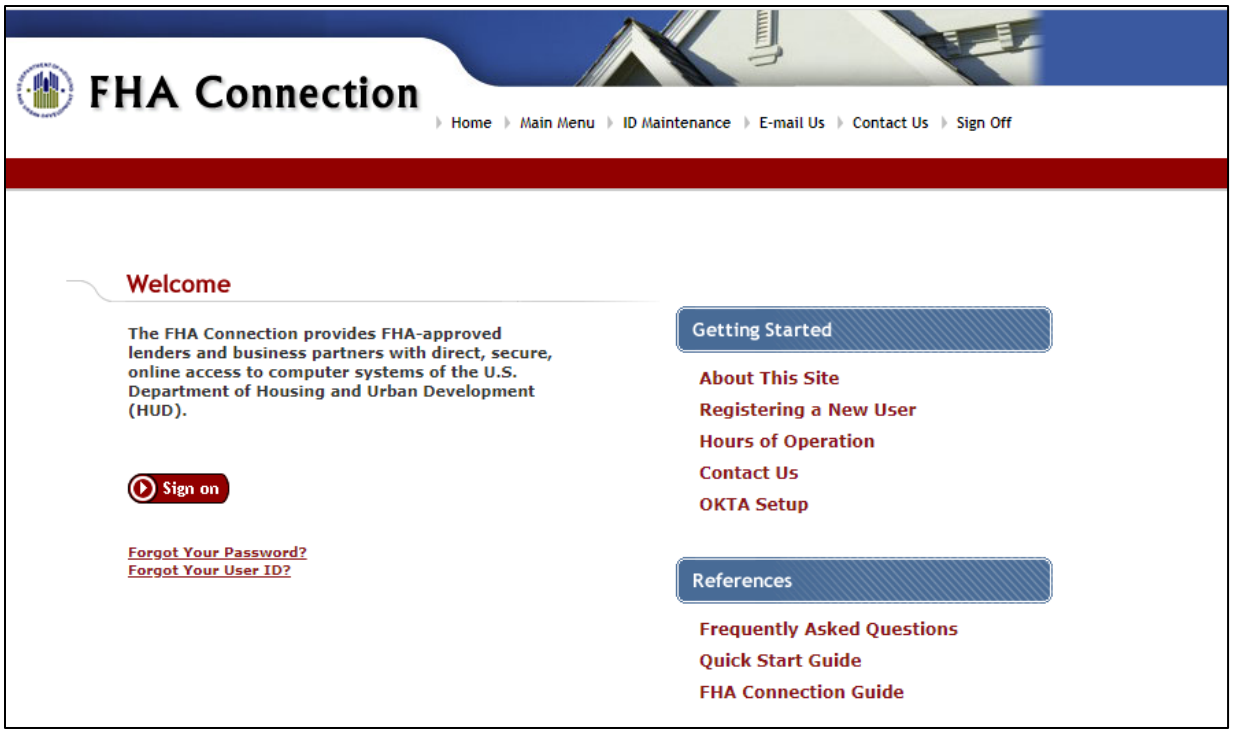
Users signing into FHAC with the user ID/password will be prompted for another authentication method and will have to enter a one-time verification key obtained from one of text message (SMS), phone call, Okta Verify, or Google Authenticator.

2.3 Access Information

Users that do not have or do not wish to use a smart phone application can enter a land line telephone number during initial setup. When using this method, the user will receive a phone call with an automated record of the one-time verification number.

2.4 Logging On

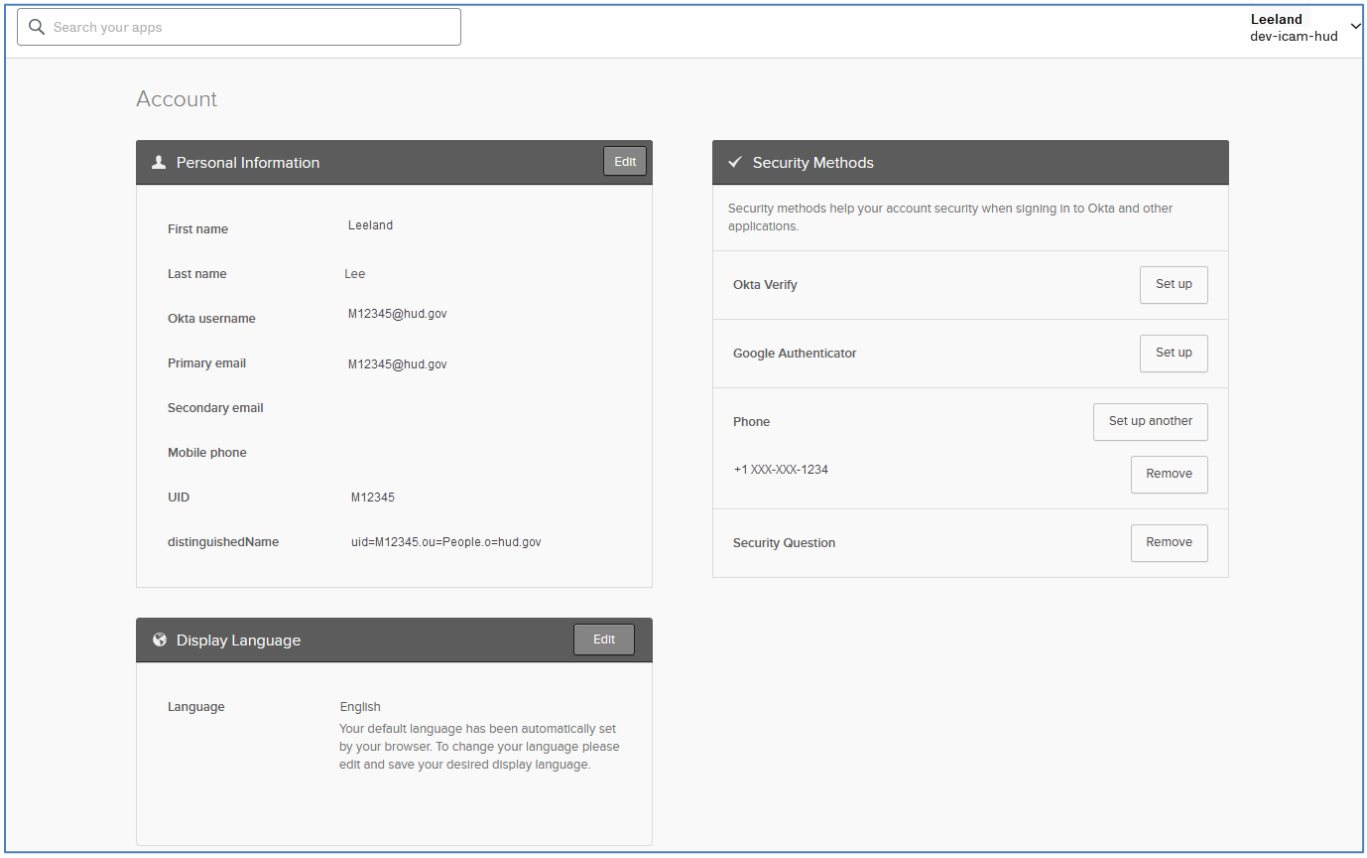
Users should access FHA Connection using the same URLs/bookmarks they have always used. If the user goes to the FHA Connection Welcome Page (https://entp.hud.gov/clas) the user can click "Sign on" to access the MFA solution.



All pilot participants are registered FHA Connection users; therefore, new user IDs are not required.

2.5 Solution Menu

Note the Okta Setup link on the page above. You can use this link to go to an Okta dashboard where you can edit your profile and set up additional authentication methods. Once on the dashboard, there is a dropdown box next to your name (or from the ••• icon) in the upper right corner of the screen. Choose Settings there to see additional authentication methods or to change your security question.



2.6 Changing User ID and Password

The same password requirements will continue to exist under multi-factor authentication. Users will be required to change passwords every 90 days and following the password strength rules already in-place.

2.7 Exit Solution

Users can simply close out the browser.

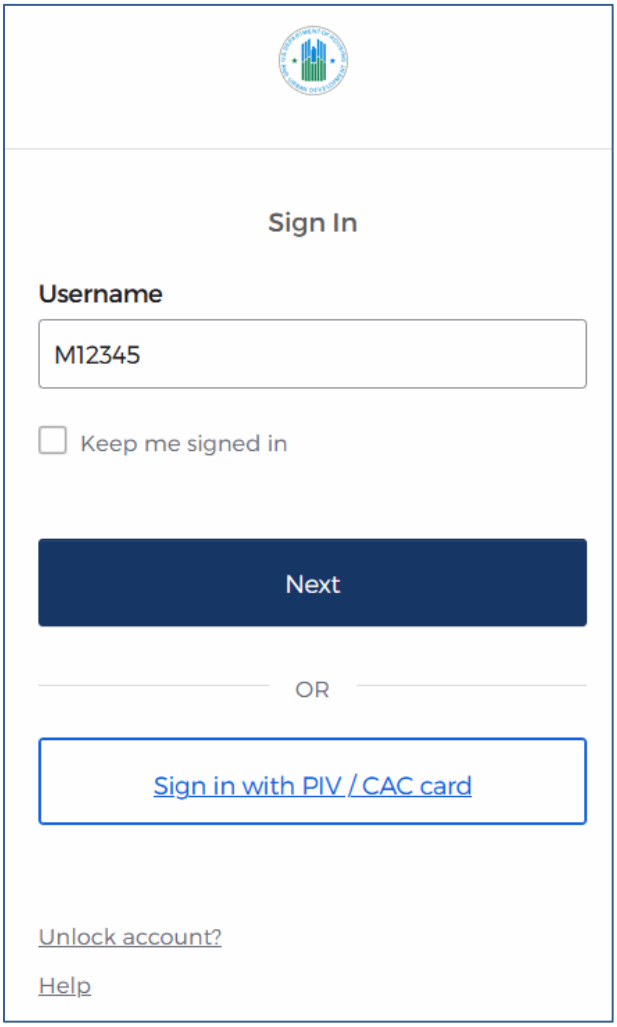
3. Using the Solution (Online)

3.1 FHA Connection MFA Start Page

The sign-in process begins on the FHA Connection MFA Start page. First, users are required to enter their username, then presented the option to select “Keep me signed in.” Second, users are required to choose between selecting “Next” or selecting “Sign in with PIV / CAC card.”

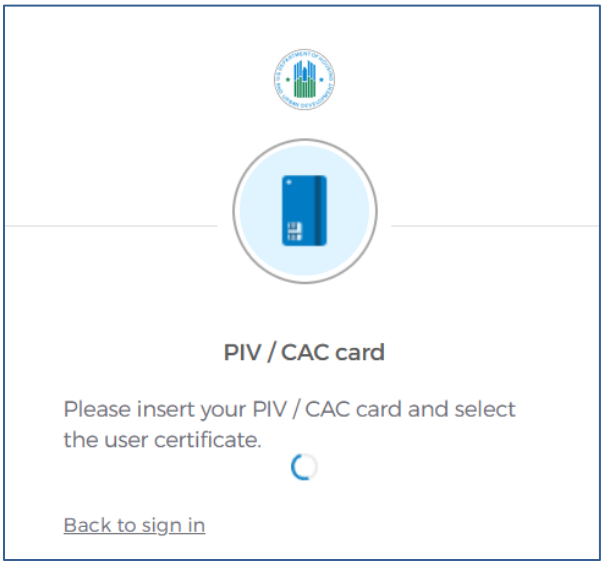
3.1.1 Signing in with Password

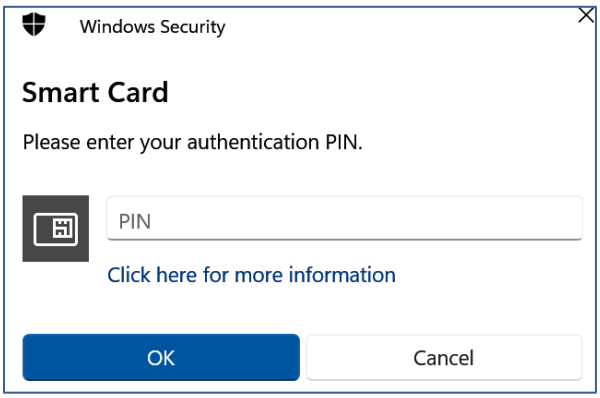
If the user opts not to sign in with a PIV / CAC card, they are prompted to enter a password.



3.1.2 Signing in with PIV / CAC Card

If the user opts to sign in with a PIV / CAC card, they are prompted to insert their PIV / CAC card if not already inserted and then will be prompted to enter the PIV card PIN.

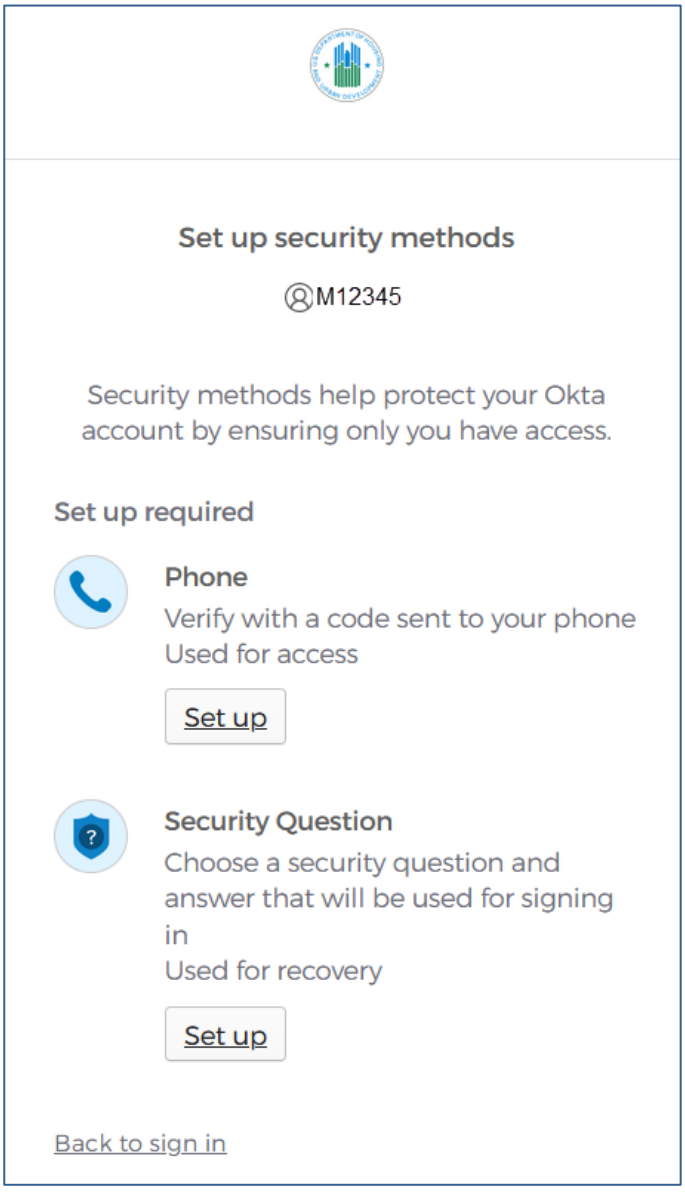




3.2 Setting Up Authentication Methods

After the user signs in, they are prompted to authenticate using a phone and a security question. These two methods are required. If you choose not to use a smart phone application (Okta Verify or Google Authenticator), you can enter a land line phone number to receive one-time verification keys via a phone call recorded message. If you choose to use text messages, enter your cell phone number here.

After setting up these two "required" authentication methods, the user will be prompted to add additional "optional" authentication methods. This is where you can choose the Okta Verify application, the Google Authenticator application, or both. (NOTE: We currently do not use the Microsoft Authenticator for FHAC).

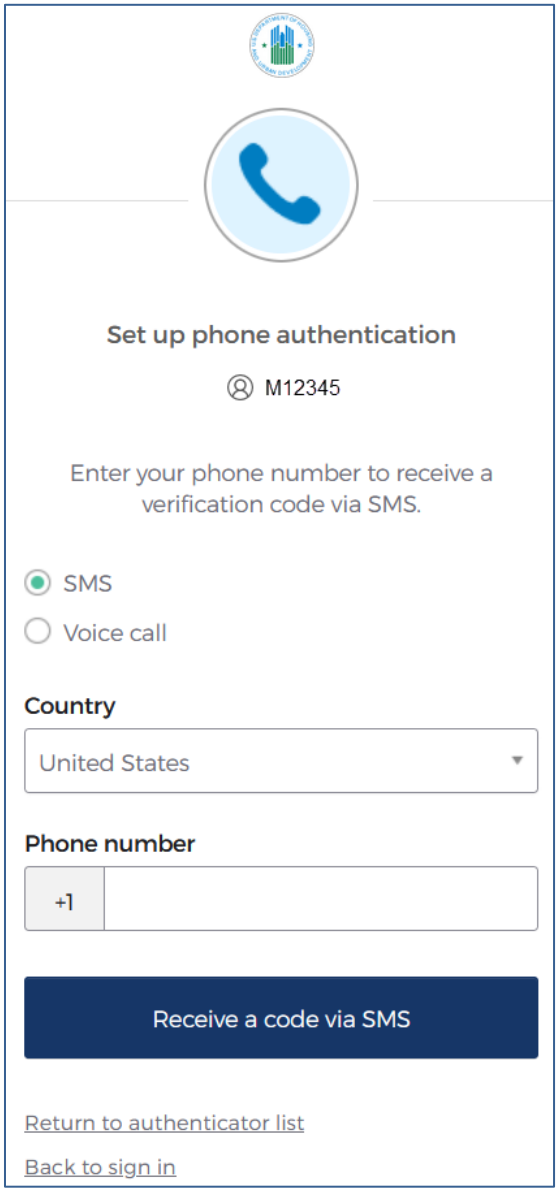


3.2.1 Authenticating with Phone

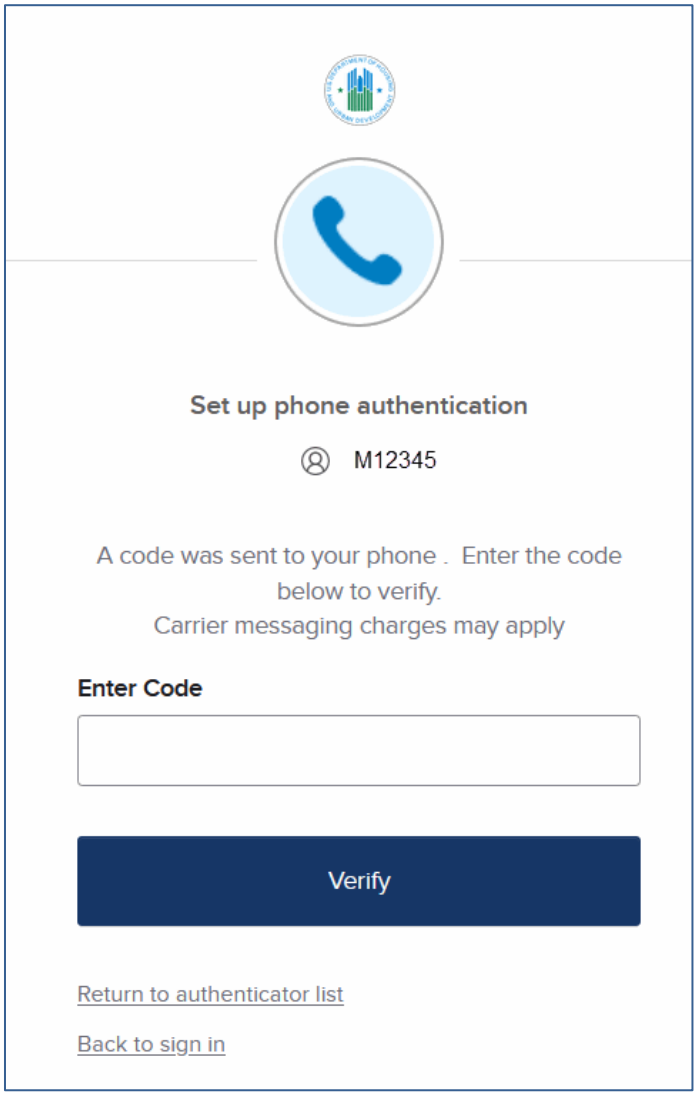
If the user opts to authenticate with a phone, they are prompted to choose between receiving a verification code via SMS or voice call. The default selection is SMS, and users are advised that carrier messaging charges may apply.

After a selection is made, the user will select the country associated with their phone number. The default country selection is “United States.” If the user selects a different country, then that country code will automatically update in the phone number field below.

The user is required to enter a complete phone number. If the user selected voice call instead of SMS, then the user will have the option to input an extension for the phone number. When all information is entered, the user will click “Receive a code via SMS” and/or “Receive a code via voice call.”

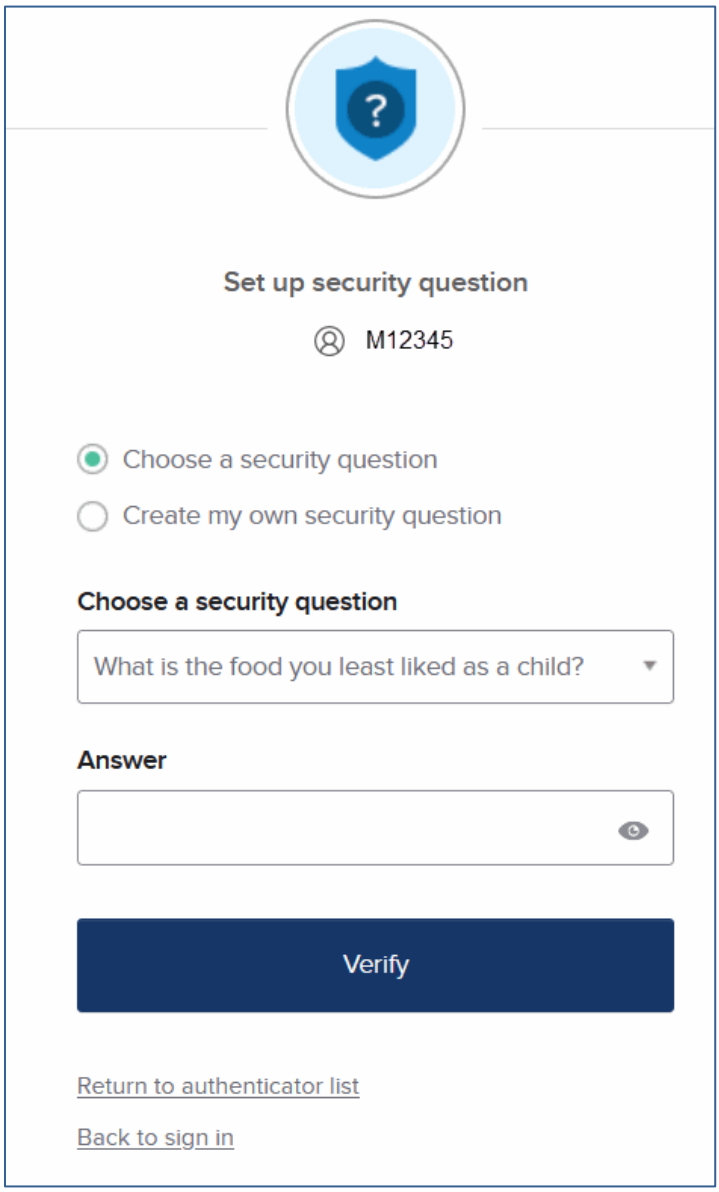


A new screen will prompt the user to enter the numeric verification code that was sent to their phone as either SMS or communicated via voice call. When the code is entered, the user will click “Verify.”



3.2.2 Authenticating with Security Question

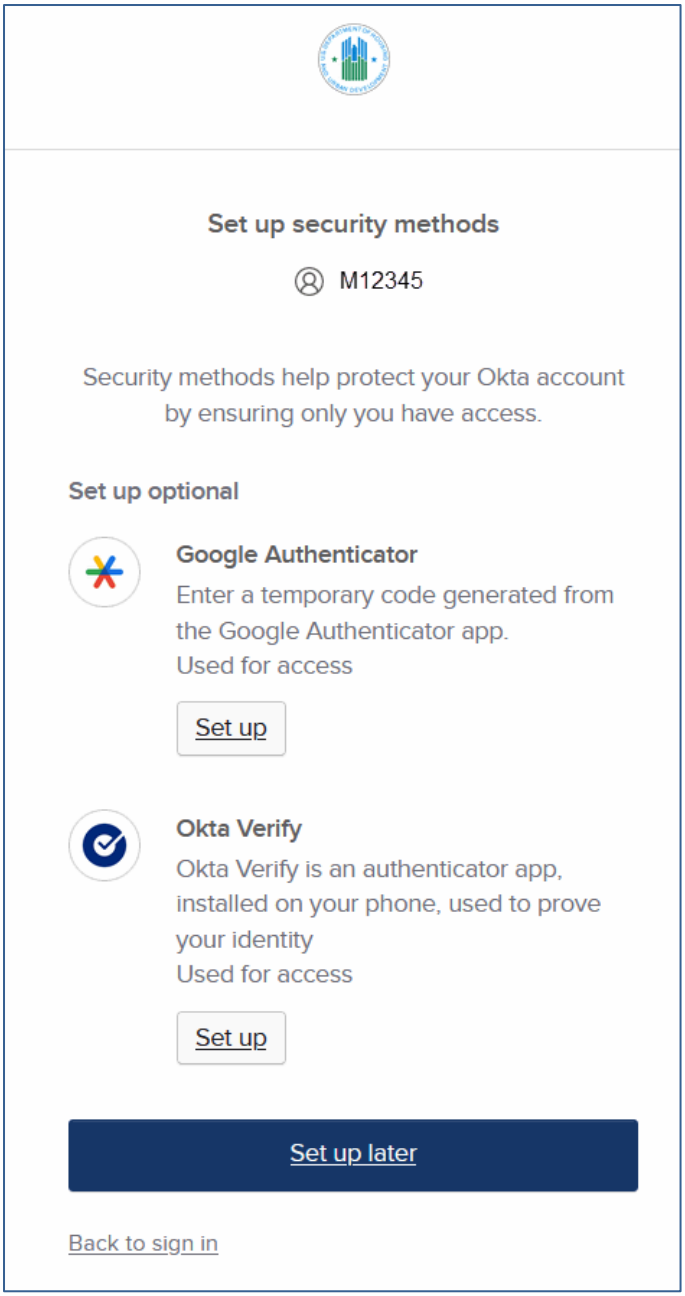
The security question is not used for normal authentication to FHAC. The security question is only used if you need to unlock your account (self-service). If you click "Forgot Password" on the initial login screen, you will be prompted for the security question. To set-up your security question initially, you are prompted to choose a security question from a list of 19 options or create their own security question. The default selection is "Choose a security question."



After a selection is made, the user is required to enter an answer to the security question. When all information is entered, the user will click "Verify."

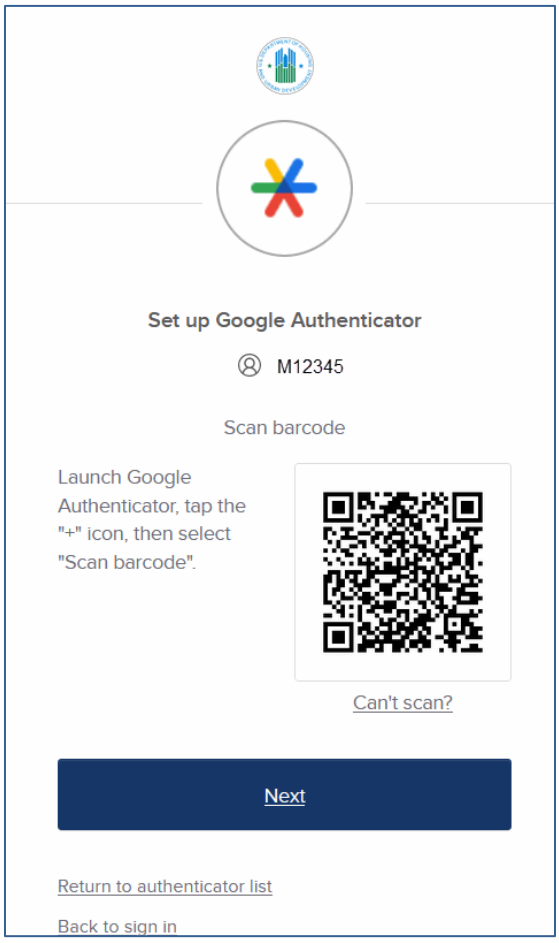
3.3 Optional Mobile App Authentication

After the user verifies access using a phone or security question, they are offered a third way to authenticate: using a mobile app. If the user does not want to install and use a mobile app to authenticate, they can click “Set up later” to skip this step.



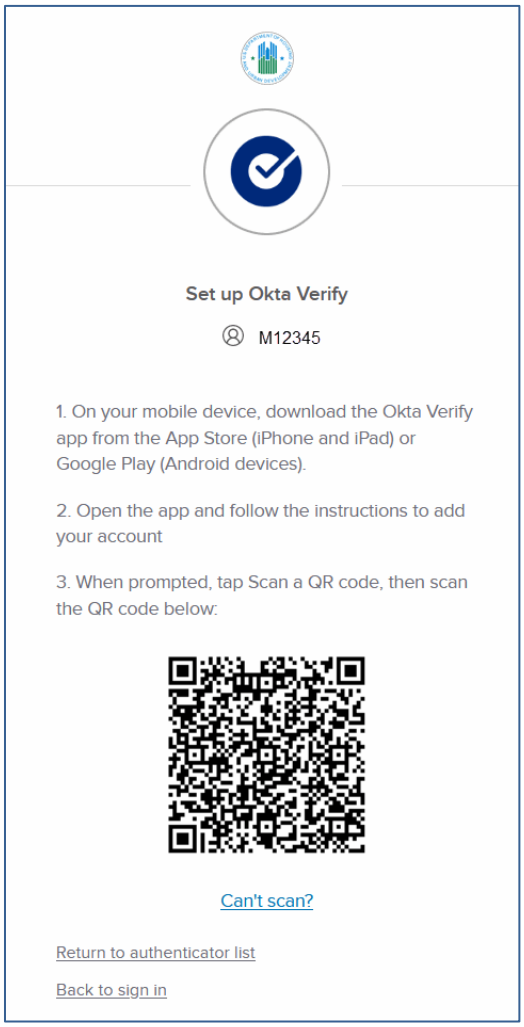
3.3.1 Google Authenticator

If the user opts to authenticate with Google Authenticator, they are prompted to scan a QR code, then enter a temporary code generated by the Google Authenticator mobile app. For future sign-ins, the user will not be required to authenticate using a phone or security question. Instead, they will be prompted to authenticate using Google Authenticator.



3.3.2 Okta Verify

If the user opts to authenticate with Okta Verify, they are prompted to scan a QR code, then enter a temporary code generated by the Okta Verify mobile app. For future sign-ins, the user will not be required to authenticate using a phone or security question. Instead, they will be prompted to authenticate using Okta Verify.



3.4 Special Instructions for Error Correction

If you chose to set these optional options up at a later time, you can set them up by clicking on the Okta Setup link on the FHAC sign-on page.

3.5 Caveats and Exceptions

Not applicable.

4. Using the Solution (Batch)

Not applicable.

4.1 <Solution Function Name>

Not applicable.

4.1.1 <Solution Sub-Function Name>

Not applicable.

4.2 Special Instructions for Error Correction

Not applicable.

4.3 Caveats and Exceptions

Not applicable.

4.4 Input Procedures and Expected Output

Not applicable.

5. Querying

Not applicable.

5.1 Query Capabilities

Not applicable.

5.2 Query Procedures

Not applicable.

6. Reporting

Not applicable.

6.1 Report Capabilities

Not applicable.

6.2 Report Procedures

Not applicable.

7. Getting Help

7.1 Solutions to Common Problems

Not applicable.

7.2 Getting More Help

Not applicable.

7.3 Helpdesk

Not applicable.

Appendix A: References

<Insert the name, version number, description, and physical location of any documents referenced in this document. Add rows to the table as necessary.>

Table 1 below summarizes the documents referenced in this document.

Document Name	Description	Location
<Document name and version number>	*<Document description>*	*<URL to where document is located>*

Table 1 - References

Appendix B: Key Terms

Table 2 below provides definitions and explanations for terms and acronyms relevant to the content presented within this document.

Term	Definition
<Insert Term>	*<Provide definition of term and acronyms used in this document>*

Table 2 - Key Terms