

# Housing App Accelerator User Documentation

Prepared for:  
Github

## Document Title

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## Revision History

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# 1 Introduction

In a constantly changing society challenged by social debates, economic upheaval, war, and natural disasters, nonprofits serve a crucial role in supplying aid and well-being to the communities where they operate. We at Avanade are committed to helping nonprofit organizations and the social sector fulfill their missions and accelerate their digital transformation.

To stand with those impacted by a humanitarian crisis, the Nonprofit Housing Accelerator will allow organizations to digitalize housing processes and governance allowing them to expand their housing offering and quickly find appropriate housing. At the same time, we hope the accelerator provides people whose lives and livelihoods are shattered by conflict and disaster, a safe home to recover and gain control of their future.

By leveraging our experience in the NGO sector and expertise with Microsoft solutions, we created a Housing Accelerator embedded within the Common Data Model for Nonprofits, Microsoft Nonprofit Accelerator, and aligned with Avanade best practices.

## **Simple and effective Digital Housing platform**

Embedded within the Nonprofit Common Data Model, the accelerator will support nonprofit organizations in the processing, governance and insights of housing applications and locations. Giving organizations the ability to quickly manage refugee needs and facilitate safe housing.

## **Powered by the nonprofit cloud and Dynamics.**

The accelerator aligns the capabilities of Microsoft 365, Power Platform, Dynamics 365 and Azure to address common nonprofit scenarios. Making it user friendly, compliant, and adaptable to market developments and social challenges. Housing accelerator can easily be incorporated into the other nonprofit processes like volunteer management, case management, Marketing and Constituent Insights.

## **Support growth and expansion**

Based on the Microsoft Framework, the solution is secure and offers a resilient, easy to integrate, scalable Platform that grows with you.

### **1.1 What This Document Is**

This document is a general overview of the features and functionality in the Housing App Accelerator. In addition, the document attempts to address what is specific towards administering Housing App Accelerator that may be different from administering a standard Dynamics environment. As an Administrator, you can configure and manage the solution to ensure that your organization gets the most out of its features and functionality. You should have some familiarity with Dynamics before attempting to use this guide.

### **1.2 What This Document Is Not**

This document does not attempt to provide an overview of how to be an administrator on the Dynamics platform in general.

### 1.3 Audience

This document is intended for all users of the Housing App Accelerator. The document assumes a basic knowledge of Microsoft Dynamics concepts and services.

### 1.4 Document Notes

Throughout the document we will summarize the outputs of each section. These outputs can be categorized under the following headings:



#### **Note**

*This header is to make the reader aware of something specific in the document and will give some additional context to the section.*



#### **Important Note**

*This header is to ensure the reader is fully aware of the point being highlighted. The information provided should be fully considered when understanding the context of the section.*



#### **Recommendation**

*A recommendation being made by Avanade, but not necessarily a design decision.*



#### **Assumption**

*Assumptions on configurations and requirements are listed.*

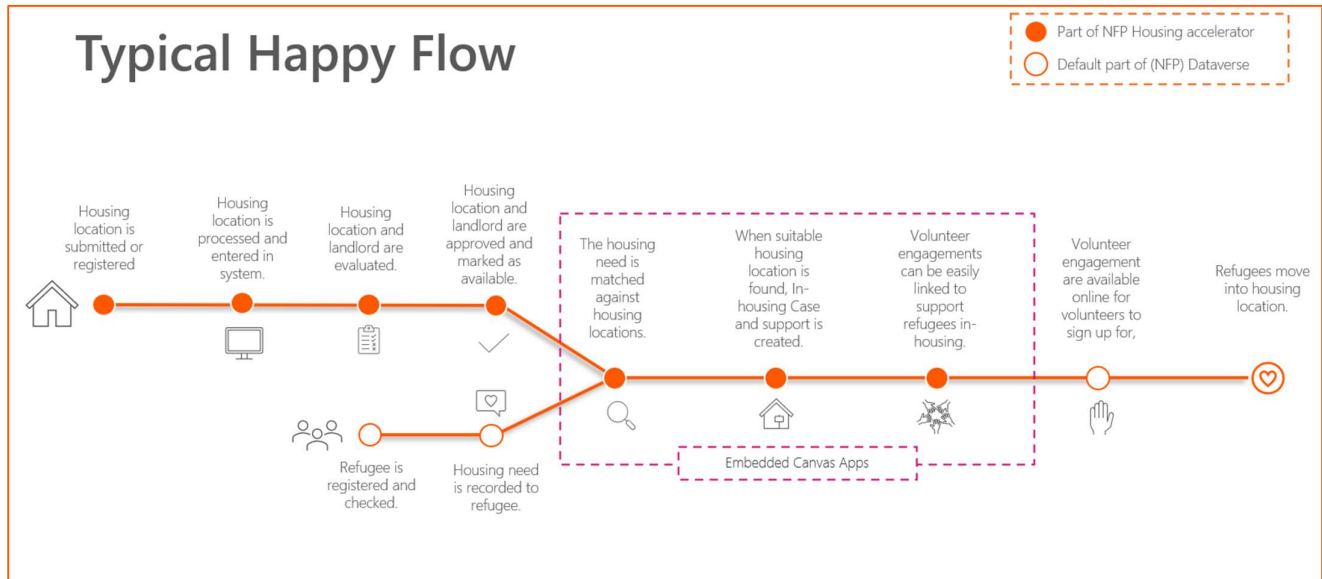


#### **Design Decision**

*A design decision based on Avanade/Microsoft recommended best practices.*

## 2 Process Overview – Happy Path Flow

The following diagram illustrates the high-level process flow for the Housing App:

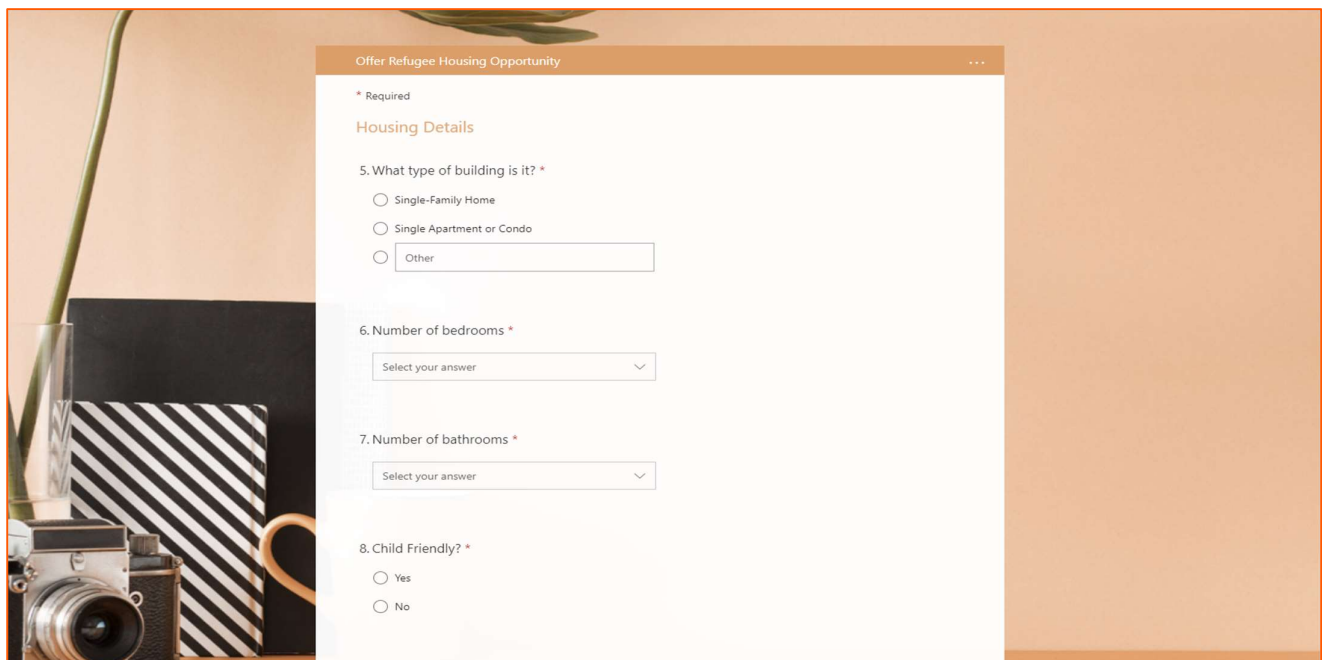


## 3 Step by Step Guide

### 3.1 Housing Location Submission

Housing location submission can be done by landlords/ homeowners by filling in a form that is enabled by Microsoft Forms. The link of the Microsoft Forms can be shared across different channels including email, teams or posted on a website etc. The solution package comes with a predefined Microsoft Forms template with a set of questions, which can also be modified based on the housing submission details that need to be captured.

1. The submission process starts when a landlord (stored as a contact) submits a Microsoft Form made available to the landlord as shown in the following screenshot:

A screenshot of a Microsoft Form titled "Offer Refugee Housing Opportunity". The form is displayed on a desktop background featuring a potted plant, a black and white striped box, and a vintage camera. The form includes a header with the title and a three-dot menu icon. Below the header, there is a section labeled "Housing Details" with a sub-header "\* Required". The form contains four questions: Question 5: "What type of building is it? \*" with radio button options for "Single-Family Home", "Single Apartment or Condo", and "Other" (which has an adjacent text input field). Question 6: "Number of bedrooms \*" with a dropdown menu labeled "Select your answer". Question 7: "Number of bathrooms \*" with a dropdown menu labeled "Select your answer". Question 8: "Child Friendly? \*" with radio button options for "Yes" and "No".

Offer Refugee Housing Opportunity

...

\* Required

Confirmation

17. I accept the general terms and conditions as well as the privacy statement surrounding the information provided. \*

☒ Yes

Back

Submit

This content is created by the owner of the form. The data you submit will be sent to the form owner. Microsoft is not responsible for the privacy or security practices of its customers, including those of this form owner. Never give out your password.

Powered by Microsoft Forms |  
The owner of this form has not provided a privacy statement as to how they will use your response data. Do not provide personal or sensitive information.  
[| Terms of use](#)

2. Once the form is submitted, the NFP Housing Service, powered by Power Automate, triggers and takes all the questionnaire inputs as submitted in the form and processes those to create the following record:
  - a. Housing Submission Activity: This record type is used to track a housing submission activity that was initiated and helps the user see all the data that was present as part of submission. Administrators can monitor the logs to troubleshoot any issue if the Housing or Landlord records are not created/updated as expected.



Read-only This record's status: Completed

## Housing Submission Received - Saved

Completed Activity Status | Submission Successfully Completed Status Reason | Norman De Los Reyes Owner

General Related

Subject \* Housing Submission Received

Owner \* Norman De Los Reyes (Off)

Regarding Charlie Bakker

Submitted Message

```
{
  "FirstName": "Charlie",
  "LastName": "Bakker",
  "EmailAddress": "charlie@bakker.com",
  "PhoneNumber": "777-2564-1234",
  "BuildingType": "Single Apartment or Condo",
  "BedroomNumber": "2",
  "BathroomNumber": "1",
  "ChildFriendly": "Yes",
  "PublicTransportNearby": "Yes",
  "BuildYear": "2008",
  "Streetline1": "520 Xavier Street",
  "City": "Westminster",
  "State": "CO",
  "Zipcode": "80030"
}
```

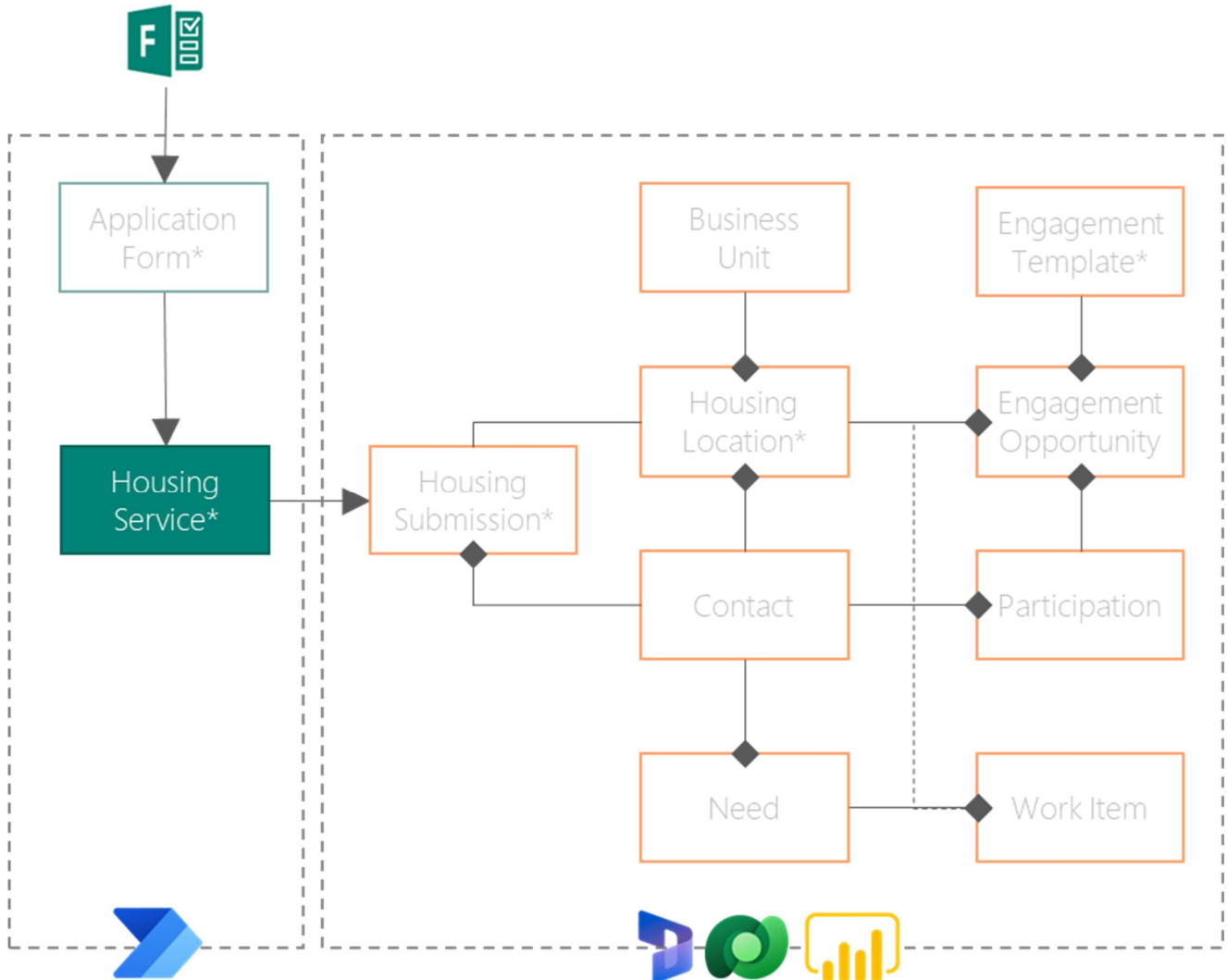
Timeline

Search timeline

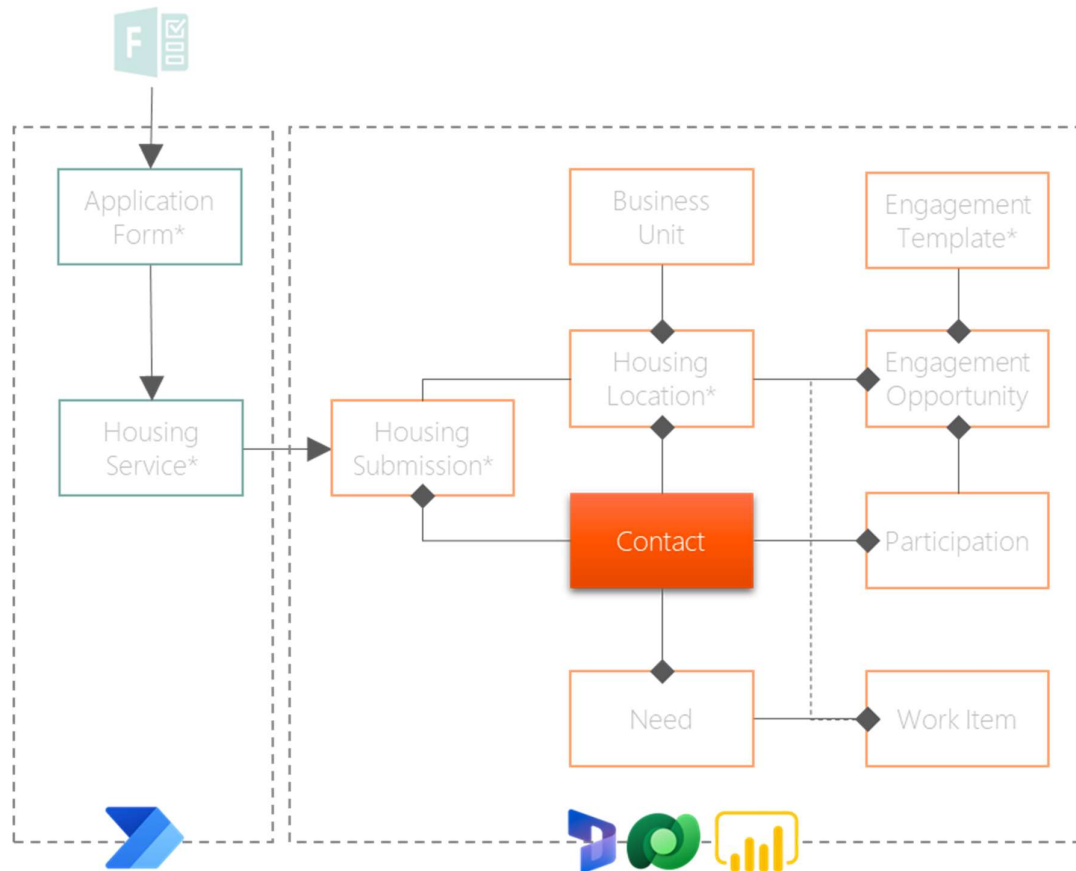
Enter a note...

Get started

Capture and manage all records in your timeline.



- b. Landlord: This record is stored as part of Contact table to identify all the Landlords present in the system and track all the related General Information and Housing Details.



- c. Housing Locations: This record type is used to store the housing details such as the location, address, type of property, other property features, status of the Housing etc. The Housing Location will contain all submitted housing details including:
- Linked Landlord
  - Address
  - Housing Type
  - Number of Rooms
  - Number of Bedrooms
  - Number of Bathrooms
  - Kitchen appliances
  - Community services and nearby facilities.
  - Targeted Rent
  - Availability options
  - Other attributes can be added as needed.

1201 Larimer St, Denver - Saved  
Housing Location

KB Kerry Brompton Owner  
iompoc Owing Business Unit

Housing Location  
Active for 71 days

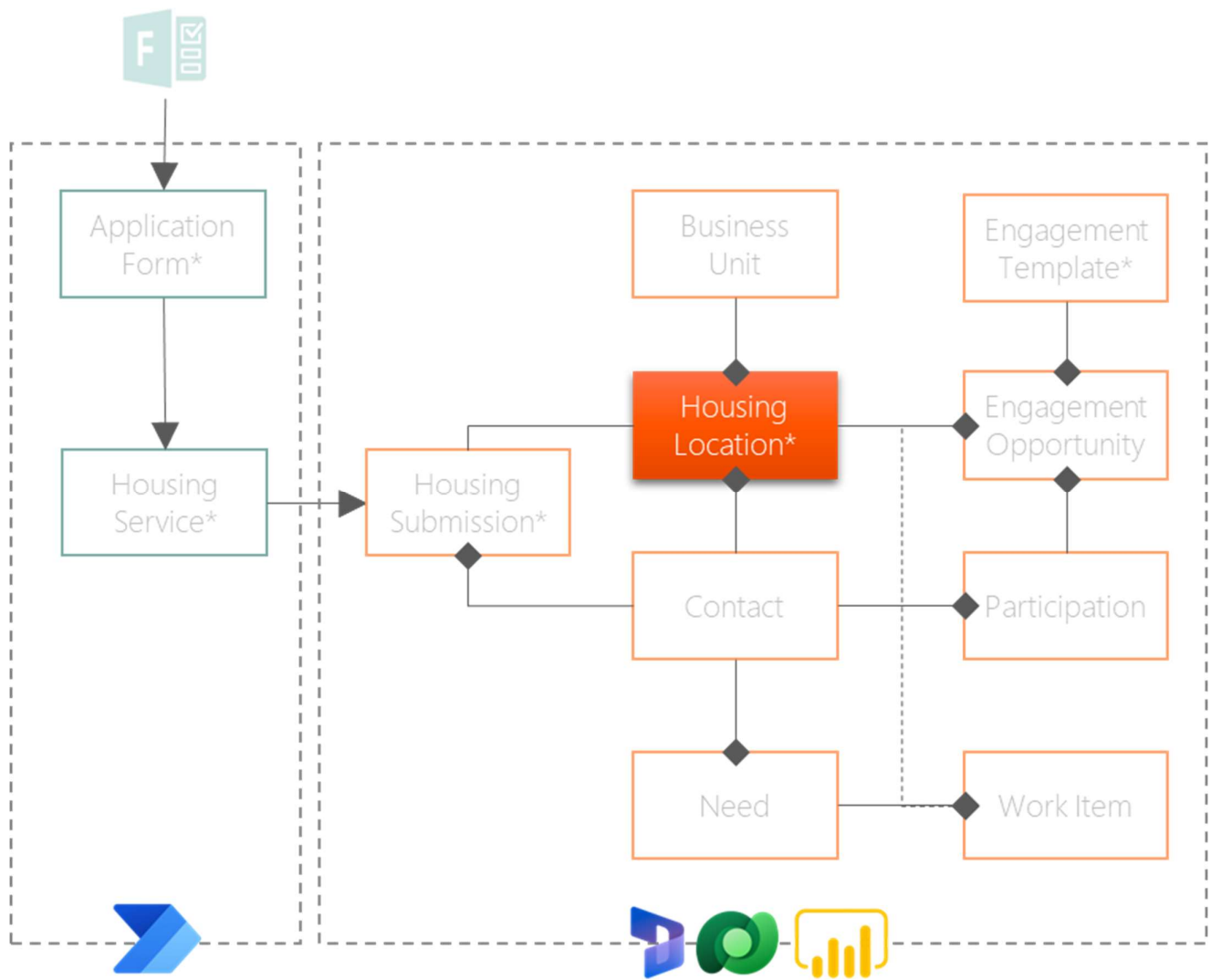
Submission Received (71 D)

General Work Items Engagements Linked Units Administration Related

Landlord \* Samantha Derrek  
Parent Location ---  
Email sam.derrek1234@o...  
Business 6699779060  
Status Reason Newly Submitted - To Be  
Occupant  
Current Occupant ---

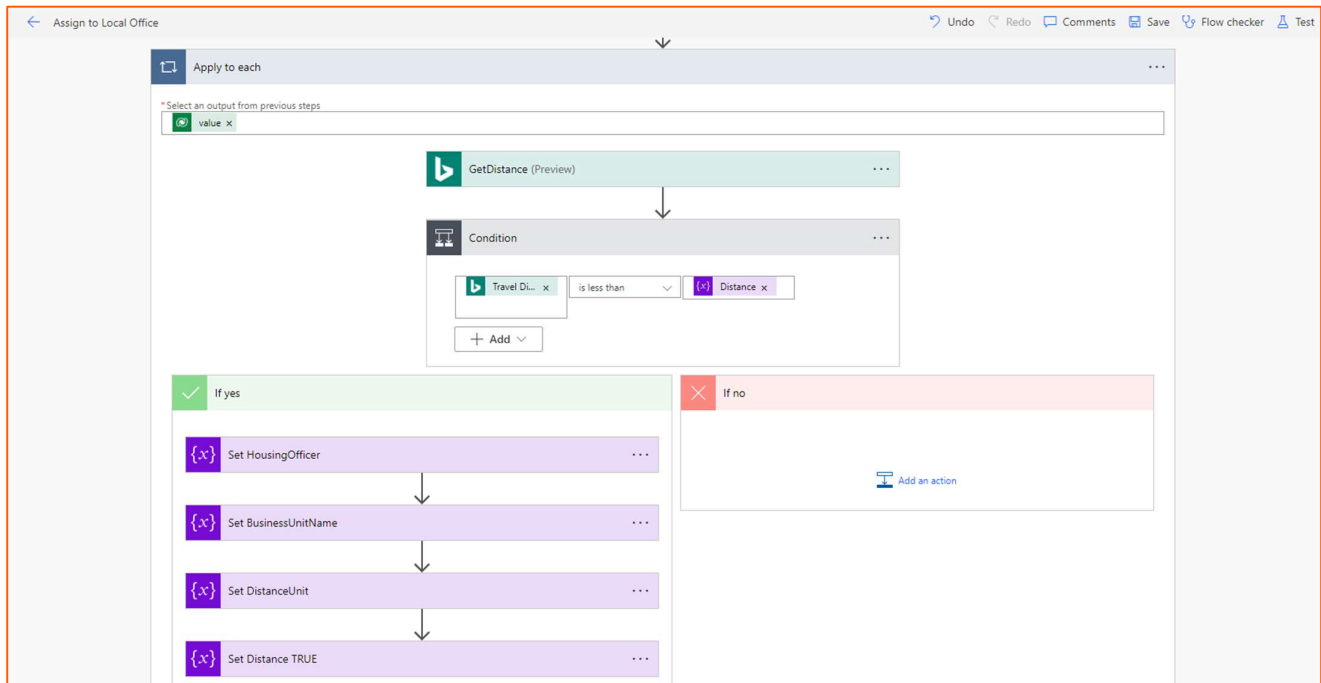
Housing Details  
Housing Type Single Apartment or Condo  
Property Build 2016  
Number of bathrooms 2  
Number of bedrooms 3  
Pets Allowed Yes  
Child Friendly Yes  
Public Transport Nearby Yes  
Additional None

Timeline  
Search timeline  
Enter a note...  
Get started  
Capture and manage all records in your timeline.



### 3.2 Housing Location Evaluation and Approval

After a Housing location record is created in the system, it can be assigned to the nearest local office by using the prebuilt power automate that geolocates the housing address and assigns to the nearest business unit (office) based on geolocation saved at the business unit level.



When the housing location record is created, it is initially in the "Newly Submitted – To be Approved" status. After the details are validated, it can be changed to "Approved – Available" so that it shows up while searching for a housing need. A Default process flow has been added to guide possible due diligence checks and trigger GEO assignment.

The screenshot shows a web application interface for a housing location record. The record is titled "1201 Larimer St, Denver" and is in the "Housing Location" status. The record is "Active for 71 days". The interface includes a "Submission Received (71 D)" tab and a "General" tab. The "General" tab shows the "Landlord" as "Samantha Derrek" and the "Status Reason" as "Newly Submitted - To Be". The "Housing Details" section shows the following information:

Field	Value
Housing Type	
Property Build	
Number of bathrooms	
Number of bedrooms	3
Pets Allowed	Yes
Child Friendly	Yes
Public Transport Nearby	Yes
Additional	None

A modal window is open, showing the "Assign To Local Office" button and the "Run Flow" button. The modal also displays the "Set Status" button and the "Finish" button.

### 3.3 Housing Need Matching

A Housing Need can be captured in the system via different sources. The accelerator utilizes the 'Need' record type present as part of the Common Data Model for Nonprofits. The following details are captured as part of a Housing Need:

The screenshot shows a web form titled "Direct Housing needed" with a subtitle "Need". The form is divided into two main sections: "General" and "Housing Requests".

**General Section:**

- Beneficiary: Michael Bloomberg
- Need Name: \* Direct Housing needed
- Need Type: Housing
- Severity: High
- Description: ---

**Housing Requests Section:**

- Housing Type: Studio
- Housing City: ---
- Housing State: NY
- Number of Bedrooms: 1
- Number of Bathrooms: 1
- Child Friendly: ☒ Yes
- Near Public Transport: ☒ Yes

Once a Need is captured, an embedded canvas app on the Need form allows the user to search the available housing location by using filters and the results display using a map view. The default filter on Search for Housing tab is set same as the values set on the General tab. User can change the filter to view the results either directly in a list view or a map view. By default, a list view is shown which can be changed to a map view by clicking on "Search Map" present on the left below the filters.

#### Direct Search for Housing

This screenshot is identical to the one above, showing the "Direct Housing needed" form with the same fields and values.

Direct Housing needed - Saved  
Need

General
Search for Housing
Indicators
Work Item Actions
Work Items
Related

City

▼

Bedrooms

2
▼

Bathrooms

1
▼

Status Reason

Approved - Available
▼

Near Public Transport

Yes
▼

Pets Allowed?

▼

Rent (\$500)

Search Map

Approved - Available  
New York, NY  
943 Second Avenue  
Approved - Available  
Public Transport Nearby: Yes  
2 Bedrooms  
1 Bathrooms  
Rent \$:  
Public Transport Nearby: Yes

Approved - Available  
New York, NY  
969 1st Ave  
Approved - Available  
Public Transport Nearby: Yes  
2 Bedrooms  
1 Bathrooms  
Rent \$:  
Public Transport Nearby: Yes

Approved - Available  
New York, NY  
338 Columbus Avenue  
Approved - Available  
Public Transport Nearby: Yes  
2 Bedrooms  
1 Bathrooms  
Rent \$:  
Public Transport Nearby: Yes

Approved - Available  
New York, NY  
1291 Lexington Ave., #1291  
Approved - Available  
Public Transport Nearby: Yes  
2 Bedrooms  
1 Bathrooms  
Rent \$:  
Public Transport Nearby: Yes

## Search on Map for Housing

Direct Housing needed - Saved  
Need

General
Search for Housing
Indicators
Work Item Actions
Work Items
Related

State

NY
▼

City

▼

Bedrooms

1
▼

Bathrooms

1
▼

Status Reason

Approved - Available
▼

Near Public Transport

Yes
▼

Rent (\$500)

Search List

Once a Need is matched or a housing location and is selected based on the Need, a work item gets created via the app to provide all necessary support for the housing location.



Direct Housing needed - Saved  
Need

Active  
Status Reason

KB  
Kerry Brompton  
Owner

General
Search for Housing
Indicators
Work Item Actions
Work Items
Related

New York

25 Union Square West, 25

Studio

1 Bedrooms

1 Bathrooms

Near Public Transport: Yes

Approved - Available

<<< Back

Confirm >>>

Direct Housing needed - Saved  
Need

Active  
Status Reason

KB  
Kerry Brompton  
Owner

General
Search for Housing
Indicators
Work Item Actions
Work Items
Related

Create Work Item for Housing Match

Title
InHousing Requested New York

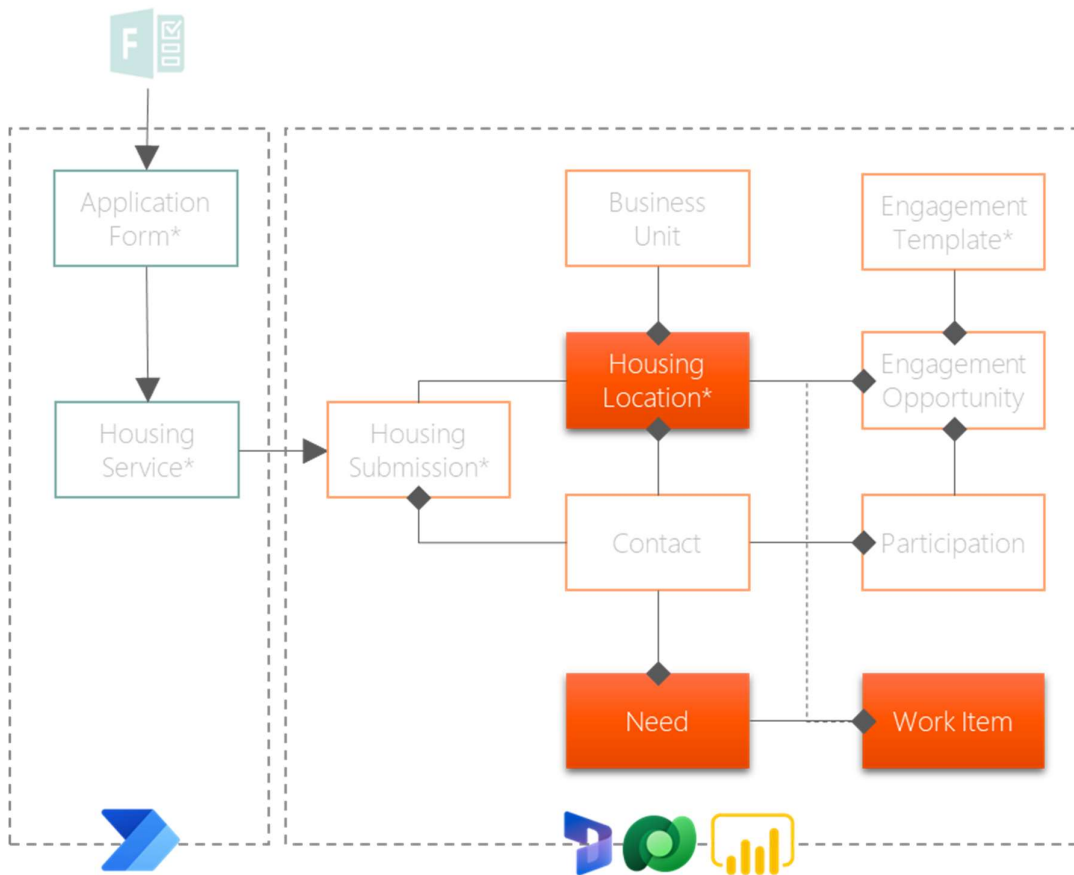
Comment

Need:
Direct Housing needed

Housing:
25 Union Square West, 25

Beneficiary:
Michael Bloomberg

Create Work Item



### 3.4 Housing Case and Support Management

The accelerator utilizes "Work Items", and "Work Item Actions" record types present as part of the Common Data Model for Nonprofits to help manage the housing work items. It provides flexibility for creating work items. For instance, the solution package contains an automated process to create quick work items associated against a Need to perform the necessary actions to "Confirm Housing" (using a simple canvas app) and make the matched housing ready and available.

The accelerator allows defining Work Item Title, Beneficiary, Work Item Type, Work Item Priority, Housing Location, Parent Work Item and Comments. A Work Item can be assigned to a team or a user, and multiple work item actions/ task can be added as shown below:



**InHousing Requested New York** - Saved  
Work Item

New Status Reason KB Kerry Brompton Work Item Manager --- Related Delivery Framework

General Indicators Needs Engagement Opportunities Related

Work Item Title \* InHousing Requested New York CONFIRM HOUSING

Beneficiary \* Michael Bloomberg

Work Item Type Housing

Work Item Priority Normal

Housing Location 25 Union Square West, 25, New York

Parent Work Item ---

Comment ---

Active Work Item Actions

Group By: (no grouping)

Work Item Action Title Status Reason Work Item Action Type Work Item Action Due Date Created On

Below screenshot shows automated changing of Housing Location Status and Current Occupant on click of "Confirm Housing":

**25 Union Square West, 25, New York** - Unsaved  
Housing Location

Paul Rudd Owner IOM - New York Owning Business Unit

Housing Location Active for 8 months Submission Received (8 Mo)

General Work Items Engagements Linked Units Administration Related

Landlord \* Michael Bloomberg

Parent Location ---

Email michael@bigapple.test

Business 718-290-1109

Status Reason **Approved - Occupied**

Occupant

Current Occupant Michael Bloomberg

Address

Street Line 1 25 Union Square West, 25

Street Line 2 ---

City New York

Housing Details

Housing Type Studio

Property Build ---

Number of bathrooms 1

Number of bedrooms 1

Pets Allowed ---

Child Friendly No

Public Transport Nearby Yes

Additional Information ---

Housing Financials

Rent Indication ---

Timeline

Search timeline

Enter a note...

Modified on: 8/13/2022 1:23 PM  
Note modified by Kerry Brompton  
Assigned to local office IOM - New York.  
Distance to local office: 8.886851 Miles.  
View more

Modified on: 8/11/2022 11:35 AM  
Note modified by Kerry Brompton  
Assigned to local office IOM - New York.  
Distance to local office: 8.886851 Miles.  
View more

Modified on: 8/11/2022 11:06 AM  
Note modified by Kerry Brompton  
Assigned to local office IOM - New York.  
Distance to local office: 8.886851 Miles.  
View more

Modified on: 8/11/2022 11:06 AM

### 3.5 Linking to Volunteer Engagement

A housing location can be linked to a Volunteer Engagement Opportunity. Volunteers can register to help at locations for e.g., *Welcoming, Grocery Support, Cleaning, etc.* Engagement templates, which are records to store different types of volunteering opportunities, can be quickly created at housing locations as well as for a work item though an embedded canvas app.

25 Union Square West, 25, New York - Saved  
Housing Location

Paul Rudd  
Owner

IOM - New York  
Owning Business Unit

Housing Location  
Active for 8 months

Submission Received (8 Mo)

General Work Items Engagements Linked Units Administration Related

+ New Engagement Op...

Filter by keyword

Created On	Engagement Opportunity Title	Housing Location	Work Item	Status Reason
5/3/2023 11:...	<a href="#">Neighborhood Introduction</a>	<a href="#">25 Union Square West, 25, Ne...</a>		Active
5/3/2023 11:...	<a href="#">Look for schools</a>	<a href="#">25 Union Square West, 25, Ne...</a>		Active

1 - 2 of 2

Page 1

Quick Create Engagement Opportunity

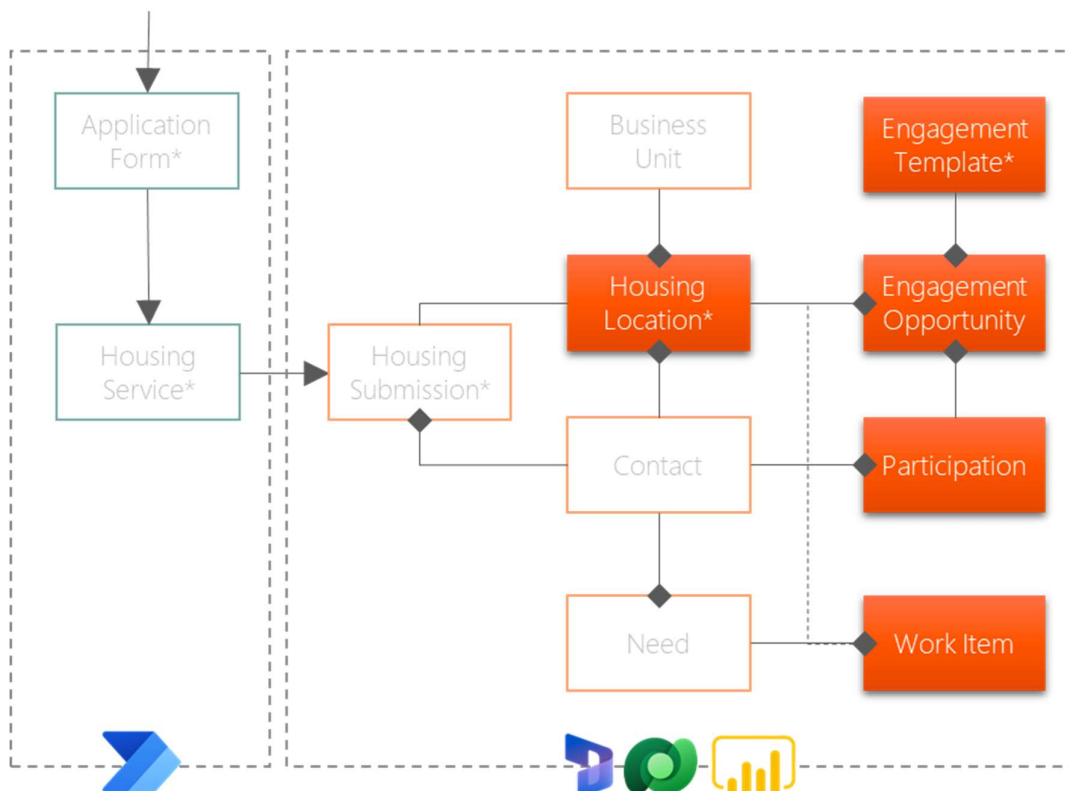
Look for schools	+
Neighborhood Introduction	+
Support grocery shopping	+
Welcome new refugees	+

Show Chart New Delete Refresh Visualize this view Email a Link Flow Run Report Excel Templates Export to Excel Import from Excel

Active Engagement Opportunity Templates

Edit columns Edit filters Filter by keyword

Name	Type	Description
<a href="#">Look for schools</a>	Housing	
<a href="#">Neighborhood Introduction</a>	Housing	Introduce newly in-housed residents.
<a href="#">Support grocery shopping</a>	Housing	Help with grocery shopping.
<a href="#">Welcome new refugees</a>	Housing	Welcome new refugees in newly assigned housing.

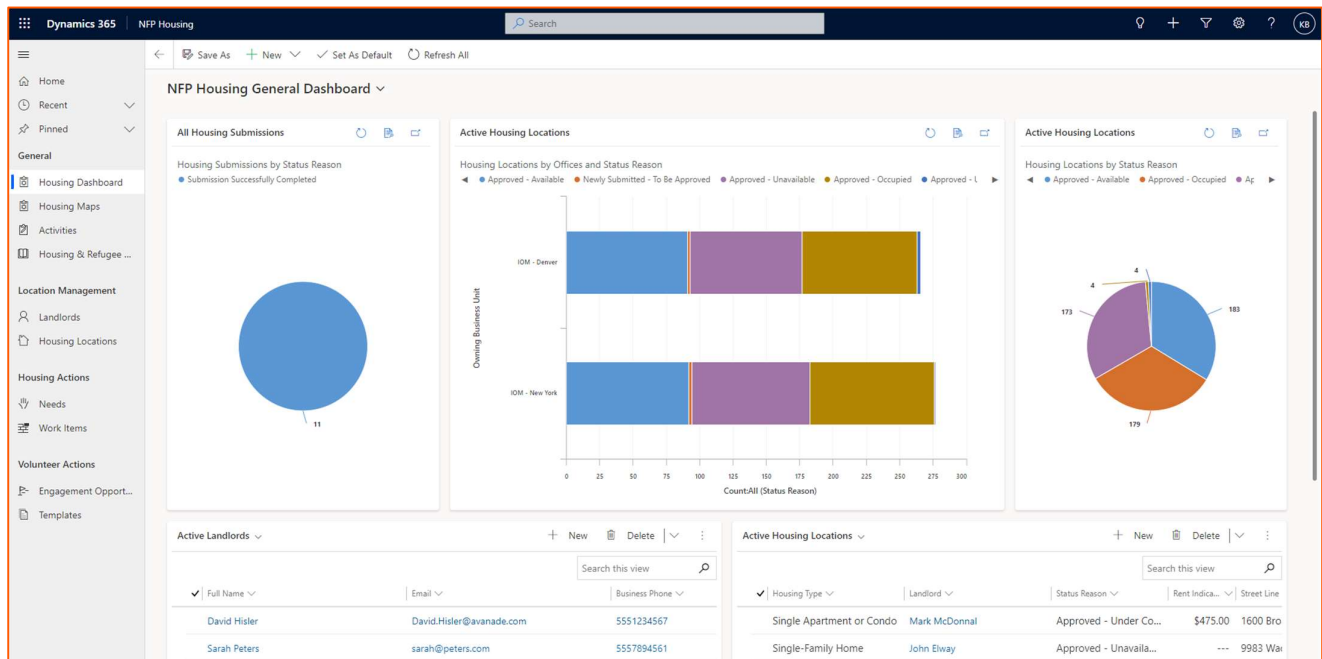


## 4 Dashboards & Reports

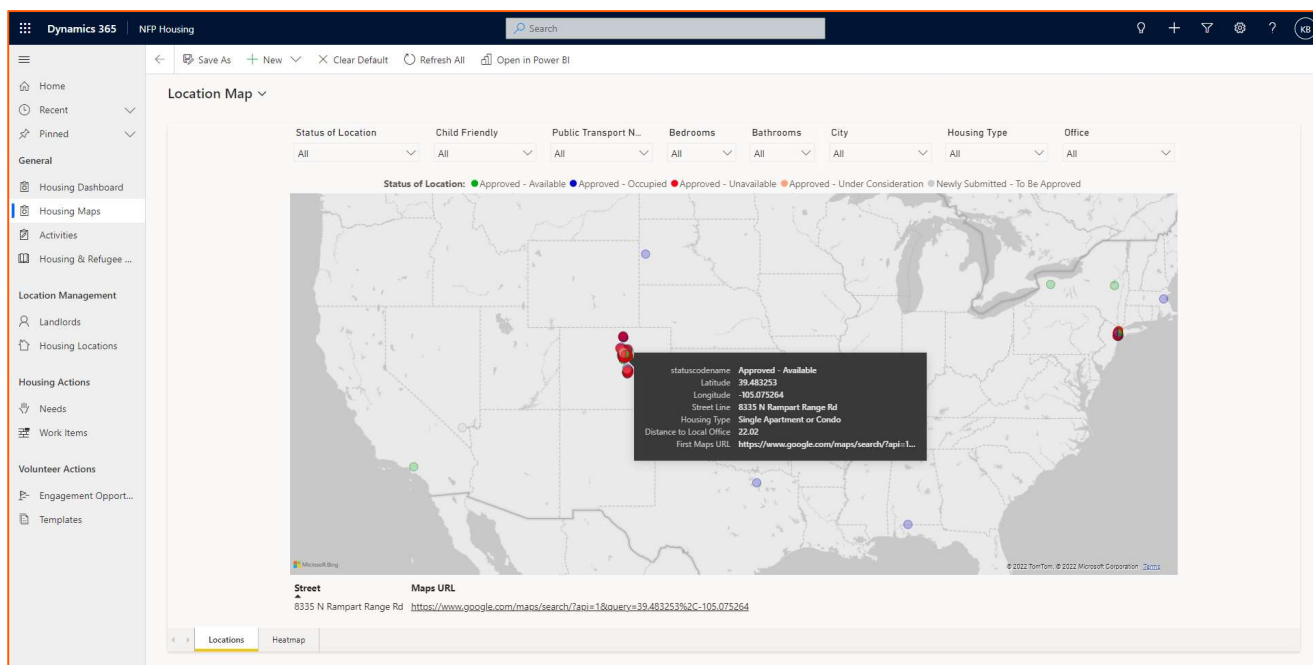
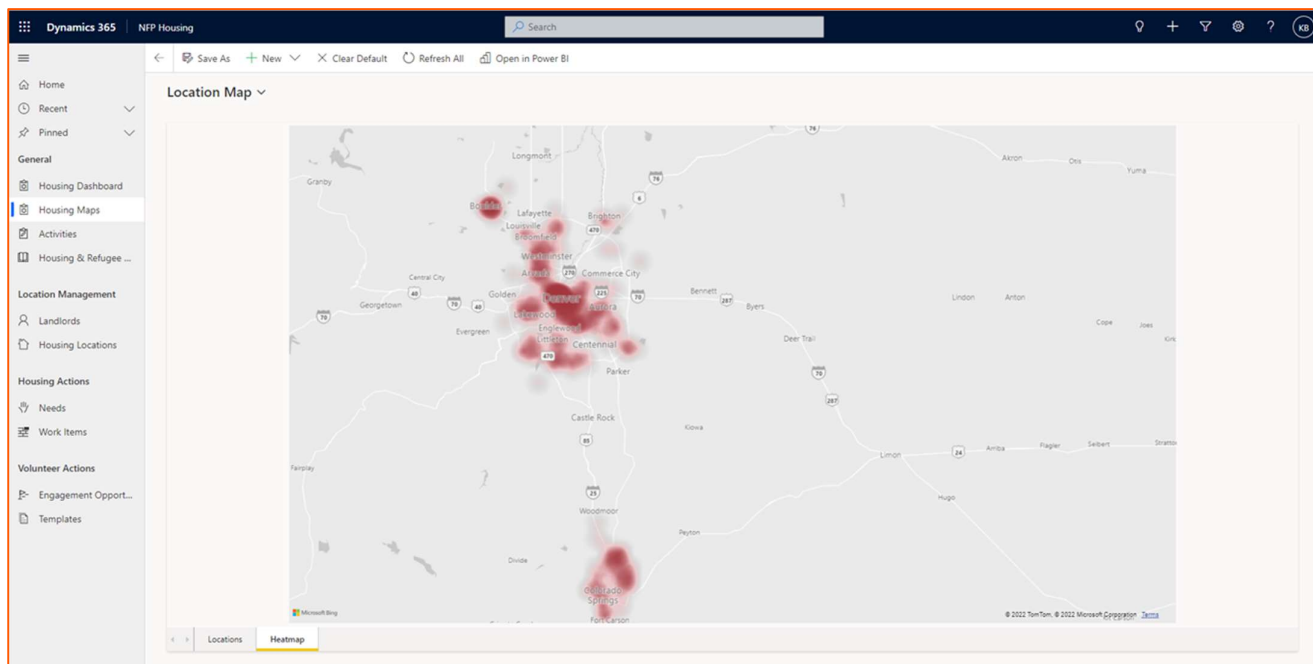
Various Dashboards have been created to provide insights into Housing Submissions and Active Locations. At the same time, Map visualizations are available to:

- Plot housing opportunities on a geographical area with sliders for main property characteristics.
- Area coverage (heatmap) of housing opportunities on a geographical area with sliders on main property characteristics.

### Insights into Housing Locations



### Location Map and Heatmap of Area Coverage



**To learn more about the Housing App Accelerator or see a demo, contact us by visiting:**  
<https://www.avanade.com/en-us/about-avanade/story/corporate-citizenship/technology-for-social-good>