

INSPECTIQ



**Transforming the Housing Industry
Utilizing Artificial Intelligence**

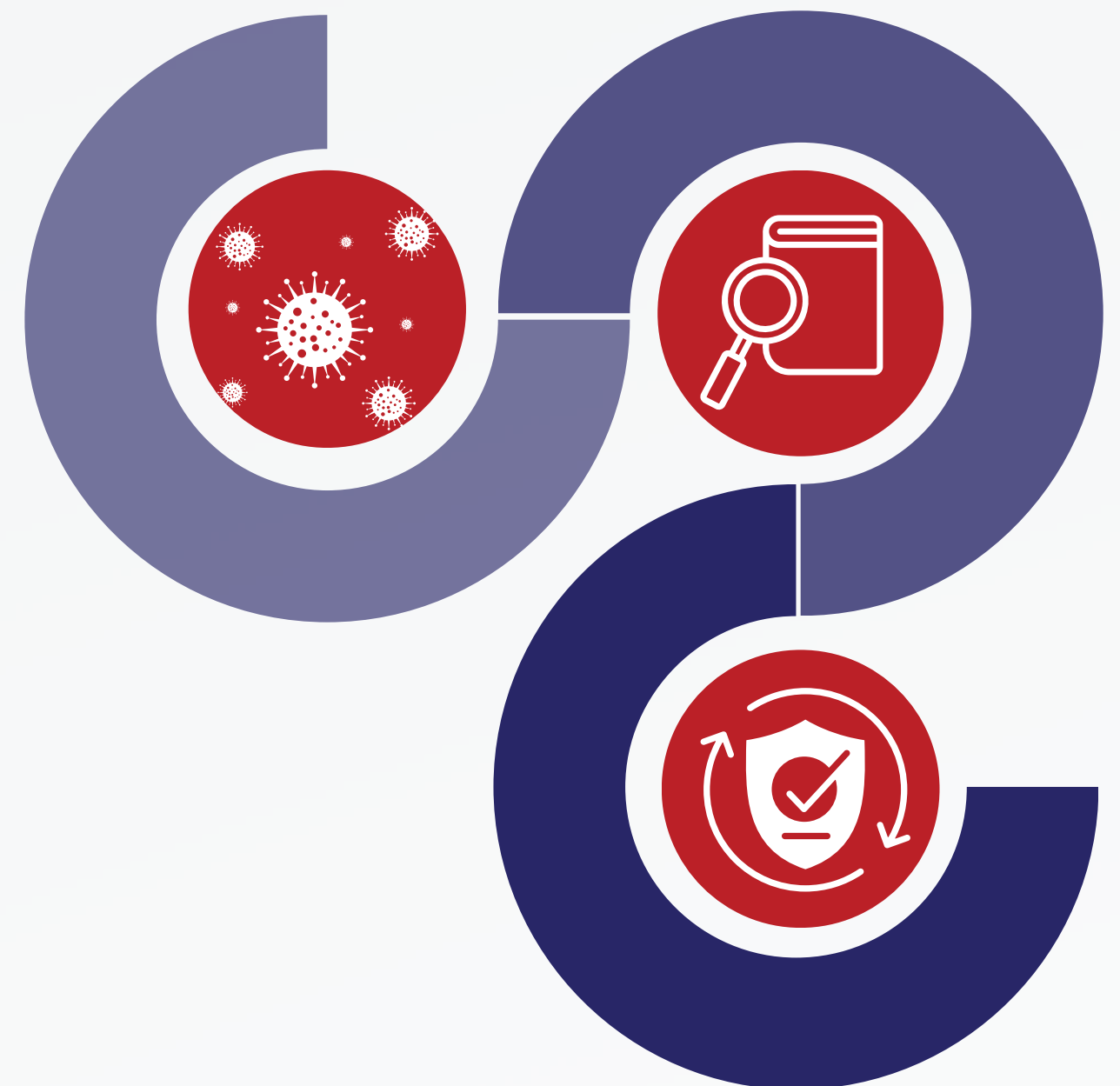
CHALLENGES

- Accelerated inspection process that reduce operational burden & cost
- Consistency and objectivity in meeting HQS standards across all PHAs
- Ability to monitor and evaluate compliance with real time access to metrics
- Ability to identify areas of need timely
- Unbiased fairness in HQS inspections
- Safe living conditions for children and elderly
- Empowering communities through the use of funding when the need is greatest



IMPACT OF MANUAL SYSTEMS

- 01** The pandemic forced the suspension of compliance inspections resulting in backlogs that jeopardized the safety & regulatory compliance of housing for families, children, and the elderly.
- 02** Manual systems are vulnerable to government shutdowns, pandemic conditions, time delays, etc.
- 03** While NSPIRE standards aim to establish uniformity, individual inspectors must rely on their own judgement when determining the level of severity.
- 04** Without compliance fraudulent activities are a significant concern, program transparency is vital.



INSPECTIQ

AN AI-DRIVEN SOLUTION THAT NOT ONLY MEETS THESE CHALLENGES BUT PAVES A NEW WAY FORWARD:



FASTER

The current manual inspection process takes weeks to coordinate, schedule, and complete. When issues are found those delays are further compounded.



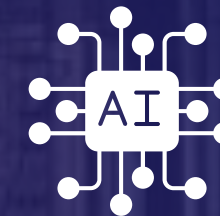
COST EFFECTIVE

The average cost of an HQS inspection is approximately \$60. Annually PHA's spend ~\$78M in inspection fees to meet compliance.



COMPLIANT

Approximately 33% of inspections fail to meet standard housing quality compliance to be considered livable and safe for occupants. Manual process can be subject to bias/fraud.



SMARTER

An AI application driven inspection process shortens the timeline, drives the cost down, and mitigates bias. AI as a tool also allows us to capture large amounts of usable data.

INSPECTIQE

2020 TO NOW

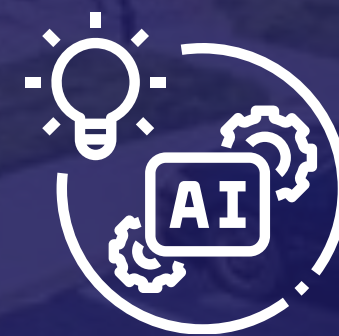
One of the biggest deterrents to get federal funds into the hands of the people in need is the amount of paperwork required for compliance, made worse by the manual nature of the processes. The pandemic caused major disruptions to this process which even now many PHAs are struggling to catch up.

VIRTUAL INSP



2020

AI MODEL APP
CREATION &
TRAINING

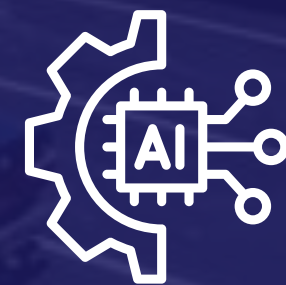


2021-23

APPLICATION
DEPLOYED



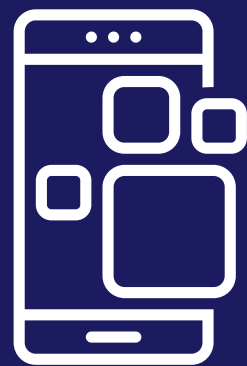
CONTINUOUS
TRAINING



2024

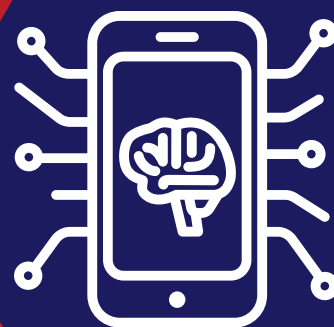
INSPECTIQ

Inspective is an application you can download from the app store, IOS and Apple. We assign properties through an internal database to approved users.



The inspector could be the PHA representative, landlord, real estate agent, tenant, or housing manager. Answer HUD Form 52580 questions and take photos of requires areas.

Behind the scenes the AI algorithm reviews the data, photo evidence, and makes a compliance judgement. While we are training the applications we are also providing quality assurance of the findings





**INSPECTIVE
1.0
FRONT END**



11:11

Select Rooms

17603 Montgall Drive, Belton, MO 64012

★ Primary Rooms

Living Room

Kitchen

Bathroom

★ Secondary Rooms

Secondary - Not used for living

Add Other Rooms Used For Living

NEXT

11:14

CEILING
Living Room

* Please answer all questions below.

01. Are there any cracks, holes, water staining or other damage to the ceiling?
 YES NO NOT SURE

02. Is there any black staining or mold growth on the ceiling?
 YES NO NOT SURE

03. Is the paint cracking or peeling on the ceiling?
 YES NO NOT SURE

NEXT

11:15

CEILING
Living Room

Example Photo Guidance

Your Captured Photos

ADD MORE PHOTOS **PROCEED**

SIMPLE, EASY TO USE, MATCHES HUD FORM 52850



**INSPECTIVE
1.0
BACK END**

**AI reviews
inspection
results**

**The AI
is being trained
to find defective
components**


**System
automatically
creates
reports.**

CEILING


Inspection Area: CEILING DEFECTIVE

QUESTION	ANSWER	COMMENT	ACTION
Are there any cracks, holes, water staining or other damage to the ceiling?	YES	There are cracks, holes, water staining or other damage to the	<input type="button" value="Update"/>
Is there any black staining or mold growth on the ceiling?	NO	There is no black staining or mold growth on the ceiling	<input type="button" value="Update"/>
Is the paint cracking or peeling on the ceiling?	NO	There is no paint cracking or peeling on the ceiling	<input type="button" value="Update"/>

CAPTURED IMAGE




PROCESSED IMAGE




PREDICTION

DEFECTIVE

CAPTURED IMAGE



PROCESSED IMAGE



PREDICTION

DEFECTIVE

* Room Codes: 1 = Bedroom or Any Other Room Used for Sleeping (regardless of type of room); 2 = Dining Room or Dining Area; 3 = Second Living Room, Family Room, Den, Playroom, TV Room; 4 = Entrance Halls, Corridors, Halls, Staircases; 5 = Additional Bathroom; 6 = Other

Item No.	1. Living Room (Continued)	Yes	No	In-Cons.	Comment	Final Approval Date (mm/dd/yyyy)
1.9	Lead-Based Paint Are all painted surfaces free of deteriorated paint? If not, do deteriorated surfaces exceed two square feet per room and/or is more than 10% of a component?				Not Applicable	
2. Kitchen						
2.1	Kitchen Area Present	<input checked="" type="checkbox"/>				
2.2	Electricity	<input checked="" type="checkbox"/>			Electricity of the property are in good condition	
2.3	Electrical Hazards					
2.4	Security					
2.5	Window Condition	<input checked="" type="checkbox"/>			Window is in good condition	
2.6	Ceiling Condition		<input checked="" type="checkbox"/>		Ceiling is not in a good condition	
2.7	Wall Condition		<input checked="" type="checkbox"/>		Walls are not in a good condition	
2.8	Floor Condition		<input checked="" type="checkbox"/>		Floor is not in a good condition	
2.9	Lead-Based Paint Are all painted surfaces free of deteriorated paint? If not, do deteriorated surfaces exceed two square feet per room and/or is more than 10% of a component?				Not Applicable	
2.10	Stove or Range with Oven	<input checked="" type="checkbox"/>			Stove or Range with Oven is in a good condition	
2.11	Refrigerator	<input checked="" type="checkbox"/>			Refrigerator is in a good condition	
2.12	Sink	<input checked="" type="checkbox"/>			Kitchen Sink is in a good condition	
2.13	Space for Storage, Preparation, and Serving of Food	<input checked="" type="checkbox"/>			Condition is good	

BUT WHAT ABOUT?

We would be remiss if we didn't think through the challenges and hurdles in using an application, managing the potential for fraud, and questioning if AI can do the same job as humans.



USE BY NON TECH SAVVY PEOPLE



97% of the US population has a cell phone, about 75% of those use apps. We continue to strive to make the app easy and user friendly. But there will likely be some who can't.



HOW DO WE KNOW IF IT'S THE RIGHT PROPERTY



There is already a huge abundance of comparable property inspection photos through databases like Zillow and previous inspections at the same home; AI trolls these.



CAN AI CATCH EVERYTHING?



AI is constantly learning. The more data, photos, and evidence we give it the better it becomes at the job it's been deployed to do. Goal is full automation for cost savings.

INSPECTIVE 
VERSION 2.0
CONTINUOUS IMPROVEMENT

The background features a futuristic digital interface with various data visualization icons and a central 'AI' logo. The interface includes a bar chart with an upward arrow, a speech bubble with 'AI', a cloud with upload and download arrows, a large 'AI' logo in a rounded square, several circular progress indicators with percentages (25.01%, 50%, 80%, 55%, 75%), and a pie chart with segments labeled 20%, 20%, 20%, and 35%. There are also icons for a padlock, gears, a person, and a robot head. The overall aesthetic is dark blue and purple with glowing light effects.

WE DON'T SEE INSPECTIVE AS JUST AN INSPECTION APP

What is the demographic info of 100% of all housing units right now?

How many available housing units are sitting vacant at any moment?

How many housing units are in abatement due to non-compliance?

What's the lead time on housing units being occupied?

What's the average time to complete inspections from start to move in?

Is there a single source to compile data from ALL 3400 PHAs?

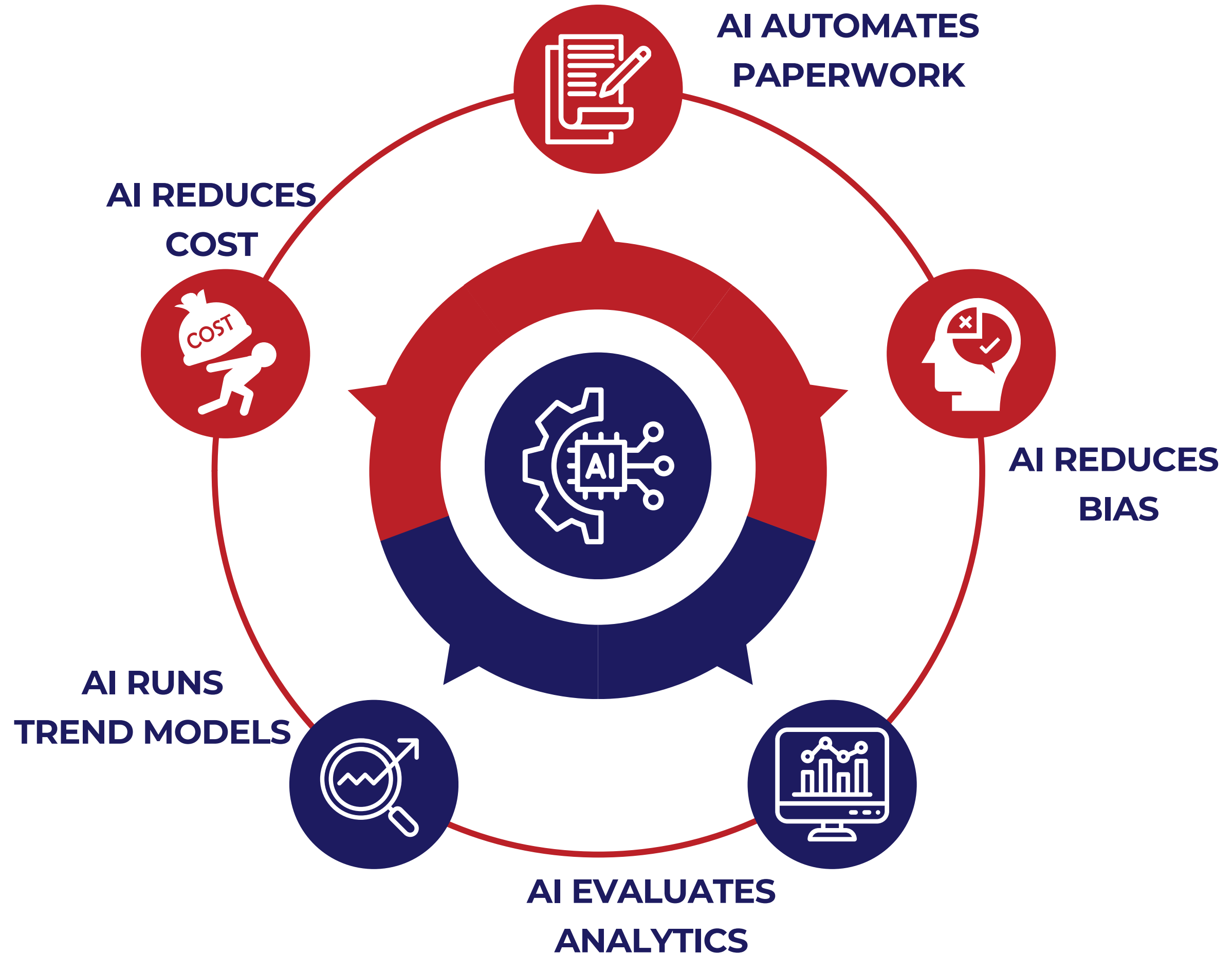
What area of the country are resources most needed right now?

Where are landlords struggling with compliance?

Where are tenants most at risk due to lack of HQS compliance?



ARTIFICIAL INTELLEGEENCE IS A TOOL



ARTIFICIAL INTELLEGEENCE IS DATA

1. Collection & Analysis
2. Centralized Data Repository
3. Long Term Monitoring
4. Interconnected Data Ecosystems
5. Predictive Analytics
6. Data Drive Insights
7. Real Time Decision Making





THE FUTURE OF AI IS EXCITING



SECURITY THROUGH BLOCKCHAIN

Data validation and security is an important aspect of any IT systems, our goal is to ensure that Inspective is backed by Blockchain technology for secure validation and compliance.



INCENTIVIZATION FOR COMPLIANCE

How can landlords and tenants be rewarded for their compliance? Through incentive and ratings programs we let the data from the inspections be the metric to incentivize everyone to reach for 'better'.



CENTRALIZATION OF DATA FOR TRENDING

Inspective AI is so much more than an inspection software application; powered by AI the system becomes a tool in partnership to ensure the data you need is readily available when you need it.

AI IS A TOOL FOR

efficiency, compliance, budget, and transparency

Imagine a world where Artificial Intelligence helps public housing systems speed up the process of helping the recipients find housing faster.

Where technology empowers every child to grow up in a home that's safe and secure.

Where the biases of humans are not impacting the outcome of inspections.

Where funds being spent on inspections can be funneled back into programs to improve homes, empower people, and ensure there are enough safe places to live.



INSPECTIVE 

INSPECTIQ

The synergy between cutting-edge AI and our continued commitment to equitable housing creates a positive reinforce cycle of efficiency, fairness, and improved living standards for communities and the people they serve.

