

# Leadership Roundtable: Empowering Cities to Accelerate Rooftop Solar Installations Across America

- **Jennifer M. Granholm**, Secretary of Energy
- **Regina Romero**, Mayor of Tucson, Arizona
- **Sam Liccardo**, Mayor of San Jose, California
- **Lynn Jurich**, CEO of Sunrun
- **Will Jawando**, Councilmember of Montgomery County, Maryland
- **John Alita**, Deputy City Manager of Stockton, California
- **Jeff Cook**, SolarAPP+ Project Lead, National Renewable Energy Laboratory
- **Becca Jones-Albertus**, Director of the Solar Energy Technologies Office



Today's presentation will be available at:  
[energy.gov/seto-webinars](https://energy.gov/seto-webinars)

# Welcome and Logistics

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- This event is being recorded
- It is also being livestreamed at [energy.gov/live](https://energy.gov/live)
- Slides, recording, and transcript will be available on [energy.gov/seto-webinars](https://energy.gov/seto-webinars)
- Submit questions in the chat
- For technical difficulties, chat or email Meisha Baylor (meisha.baylor@ee.doe.gov)

# Leadership Roundtable Guests



**Jennifer M. Granholm**  
*Secretary of Energy*



**Regina Romero**  
*Mayor of Tucson, Arizona*



**Sam Liccardo**  
*Mayor of San Jose, California*



**Lynn Jurich**  
*CEO of Sunrun*



**Becca Jones-Albertus**  
*Director of the Solar Energy  
Technologies Office*



**Jeff Cook**  
*SolarAPP+ Project Lead,  
National Renewable Energy  
Laboratory*



**Will Jawando**  
*Councilmember of  
Montgomery County, Maryland*



**John Alita**  
*Deputy City Manager of  
Stockton, California*



U.S. DEPARTMENT OF ENERGY

# Summer of Solar



**Learn More:** [energy.gov/solar](https://energy.gov/solar)

**Get Updates:** [bit.ly/summerofsolar-newsletter](https://bit.ly/summerofsolar-newsletter)

# SolarAPP+ Performance and Adoption Next Steps

Presenter: Jeffrey J. Cook PhD

Analysis Team: Juliana Williams, Matt  
Miccioli, and Minahil Qasim





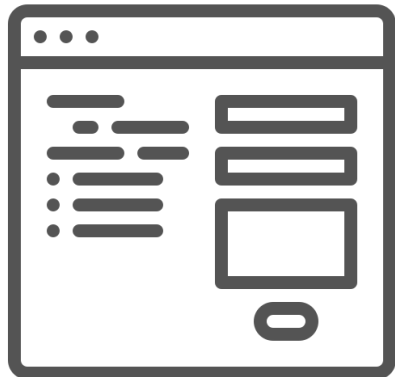
# What is SolarAPP+ and how is it governed?

- A flexible, web-based PV-permitting tool for residential systems at no-cost to AHJs.
  - Delivers instant plan review, permit approval, and a clear inspection checklist.
  - Incorporates energy storage and will expand to other market segments.
- SolarAPP+ Foundation has been established to oversee the expansion of SolarAPP+.
  - Balanced group of code officials, local governments, contractors, and subject matter experts.

# SolarAPP+ Flow

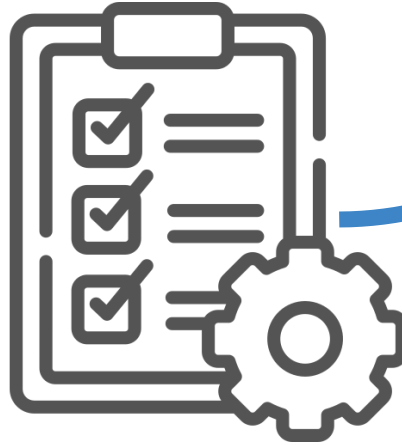
Installer submits an application with design specifications through SolarAPP+

1



2

SolarAPP+ checks the application to ensure the system design is code compliant



3

Code compliant applications are issued a permit instantly after fee payment

[\(Review sample approval docs here\)](#)



How is SolarAPP+  
Performing?

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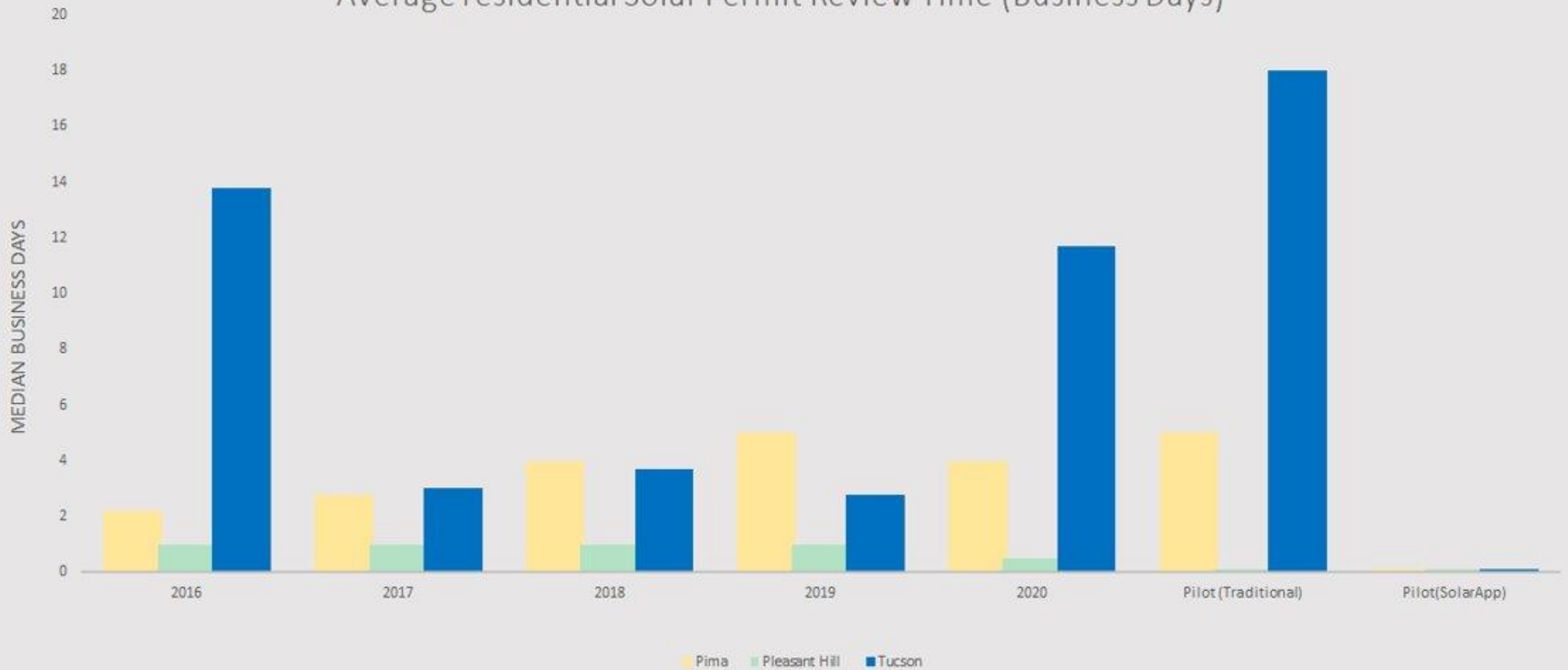
# Piloting Communities and Projects

- SolarAPP+ delivered instant permits for ~150 jobs during the pilot and over 620 jobs since.

Residential Solar Permit Submittals during SolarAPP+ Pilot				
	Traditional		SolarAPP+	
	Submitted	Inspected	Submitted	Inspected
<b>Pima County, AZ</b>	24	18	54	34
<b>Pleasant Hill, CA</b>	10	5	19	10
<b>Tucson, AZ</b>	17	12	76	44
<b>Total</b>	51	35	149	88

**PRELIMINARY DRAFT RESULTS: DO NOT CITE**

## Average residential Solar Permit Review Time (Business Days)



SolarAPP+ significantly reduces permit review times

**PRELIMINARY DRAFT RESULTS: DO NOT CITE**

# Time Savings for Local Governments

- Time saved during SolarAPP+ pilot: 186.45 hrs
- **Estimated time saved since launch: ~420 hrs**

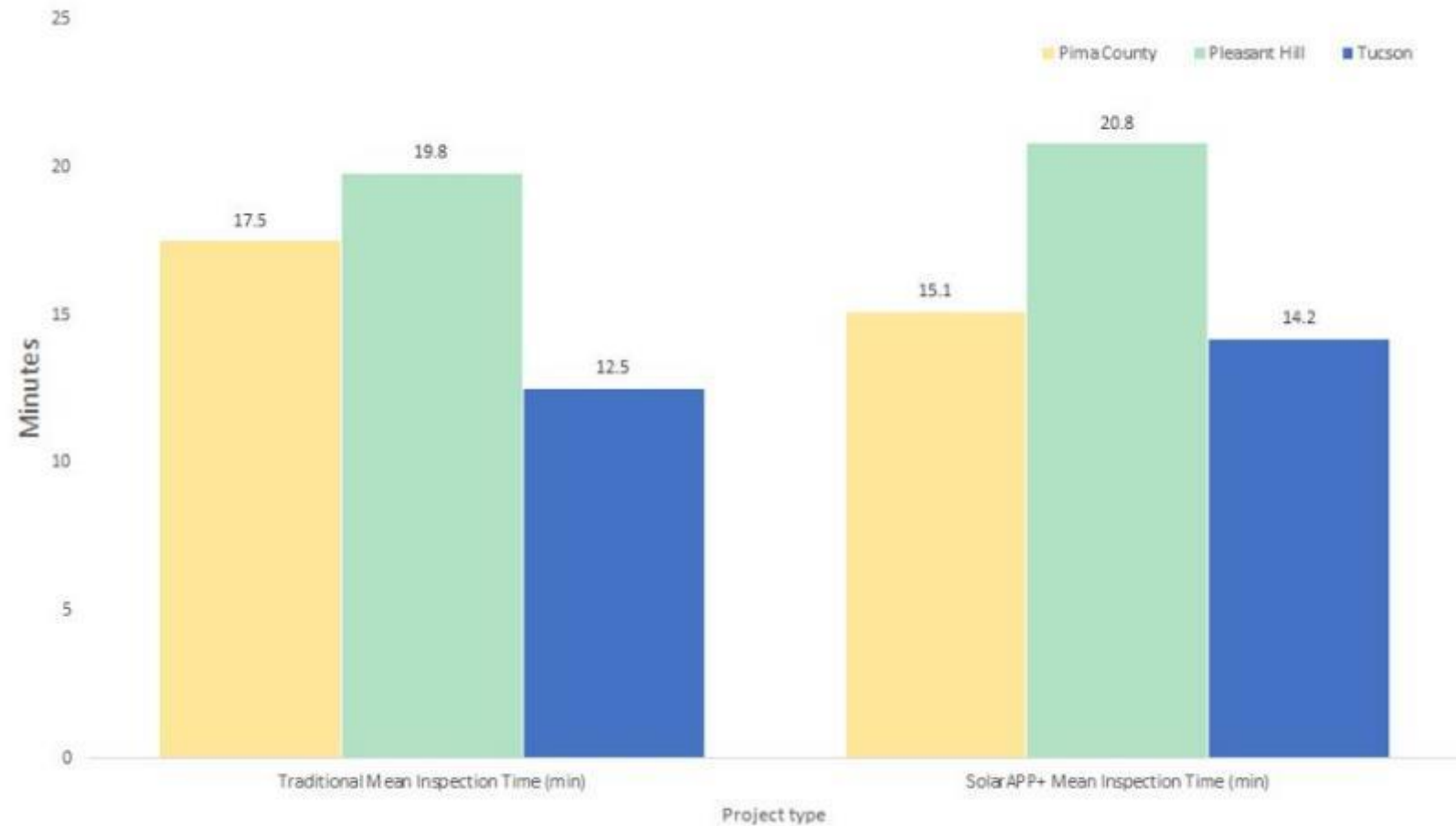
## Permitting Time Saved by SolarAPP+

	Mean permit review time (hours)	SolarAPP+ Permits	Time saved on permit review (hours)	Mean Permit Revision Time (hours)	SolarAPP+ Revisions	Time saved on permit revision (hours)	Total time saved (hours)
<b>Pima County, AZ</b>	1	54	54	0.75	11	8.25	62.25
<b>Pleasant Hill, CA</b>	0.25	19	4.75	0.20*	41	8.20	12.95
<b>Tucson, AZ</b>	1	76	76	0.75	47	35.25	111.25
<b>Totals</b>	-	149	134.75	-	99	51.7	<b>186.45</b>

**PRELIMINARY DRAFT RESULTS: DO NOT CITE**



## Mean inspection duration



SolarAPP+ Does Not Impact Inspection Durations

**PRELIMINARY DRAFT RESULTS: DO NOT CITE**

**SolarAPP+  
Inspection  
Results have  
Improved  
During the  
Pilot**

5% of all jobs in the pilot failed their first inspections.

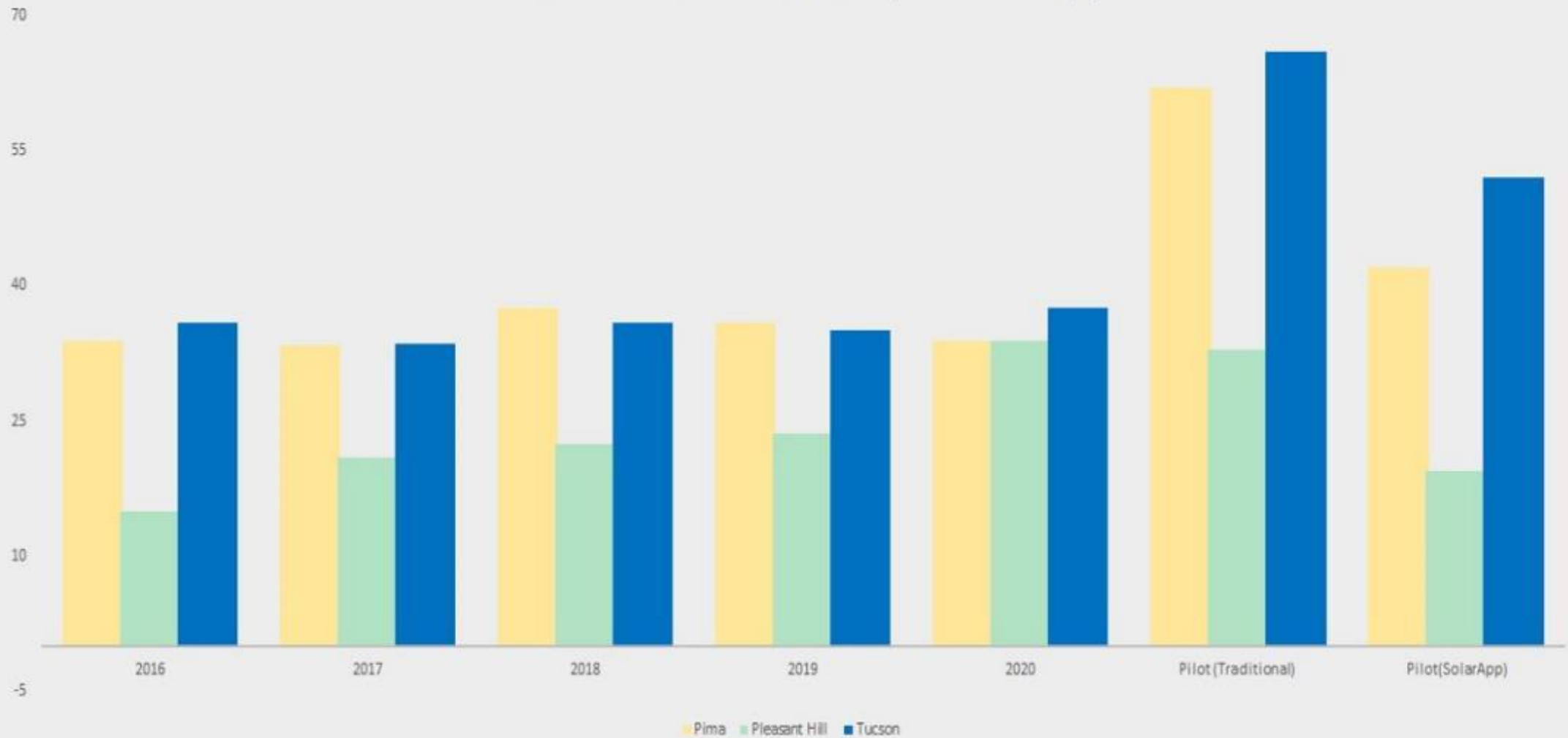
6 of 123 inspected jobs.



5 of the 6 failed inspections occurred before 5/19/21.

4 of the 6 were associated with process miscommunications.

Total Residential Permit time (business days)



SolarAPP+ also reduces overall installation timelines

**PRELIMINARY DRAFT RESULTS: DO NOT CITE**



How can you  
participate in the  
program?

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# Are you a local government?

## There are four steps to adopting SolarAPP+



### Select the Right Integration

- SolarAPP can be set up to:
- **integrate** with your existing online permitting software
  - **stand alone** as a complete online permitting solution



### Input Local Settings

- These include:
- Permitting contacts
  - AHJ boundaries
  - Local wind and snow variables
  - Model code years
  - Terms and conditions



### Setup Instant Permit Workflow

- Depending on your integration, either:
- Set up an instant permit application in your software
  - Set up permit payments in SolarAPP



### Launch

- This involves:
- Inviting 1-3 installers to use your SolarAPP permitting process
  - Opening up SolarAPP+ permitting to all installers

# Next Steps

- Register to learn more at: <https://solarapp.nrel.gov/register>.
- Join us for a follow up webinar on 7/28 hosted by the National League of Cities:
  - [bit.ly/solarapp-nlc](http://bit.ly/solarapp-nlc)
- Are you an inspector? Take IREC's SolarAPP+ inspection training:
  - <https://cleanenergytraining.org/products/inspecting-a-solarapp-system>.

The screenshot displays the SolarAPP+ onboarding interface. At the top, there are logos for SolarAPP+ and NREL, along with navigation links for 'For Jurisdictions', 'For Installers', 'About SolarAPP+', 'Solar TRACE', and a user profile 'Ken P'. Below the navigation is a breadcrumb trail: 'Home > Ahj > Onboarding'. A green notification bar states 'Subscribed to SolarAPP+'s newsletter'. The main content area is divided into two columns. The left column shows a progress list: 1. Choose Your Integration (COMPLETE), 2. Local Settings (18% complete), 3. Integration Setup (0% complete), 4. Terms & Conditions, and 5. Launch Your Pilot. Below this is a 'Local Settings Completion' progress indicator showing 18% and an 'Integration Settings Completion' indicator showing 0%. At the bottom of the left column is a 'GET HELP' button. The right column is titled 'ADDRESS VALIDATION' and contains the text: 'Fill out the following information so SolarAPP+ can set your local variables.' Below this is a table of identified locations for service. The table has two columns: 'Pleasant Hill city (CA-0657764)' and 'Contra Costa County (CA-06013)'. Each column has 'Include' and 'Exclude' buttons. Below the table, it shows 'Currently including 1 locations' and 'Currently excluding 1 locations'. At the bottom of the right column, there is a 'Save Places' button and a link to 'NEED HELP VERIFYING THESE PLACES? VISIT THE REGISTRY'. At the very bottom of the interface are 'Previous' and 'Next' navigation buttons.



# Thank you for attending!

- Sign up and learn about SolarAPP+ at [solarapp.nrel.gov](https://solarapp.nrel.gov)
- Find all SETO events & webinars at [energy.gov/seto-events](https://energy.gov/seto-events)
- Register for the National League of Cities (NLC) SolarAPP+ webinar at [bit.ly/solarapp-nlc](https://bit.ly/solarapp-nlc)
- Join in on the Summer of Solar at [energy.gov/solar](https://energy.gov/solar)



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