

# **Promise Zones: The Challenges of Developing a Counterfactual**

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# The Promise Zones Initiative is...



A White House Initiative, involving 13 federal agency partners

Part of the President's Ladders of Opportunity Agenda

Place-Based



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# PZ Benefits Delivered to Designees



Federal staff on the ground to help connect with resources



5 AmeriCorps VISTA members



Preference point for grant funding and technical assistance to more than 35 federal programs



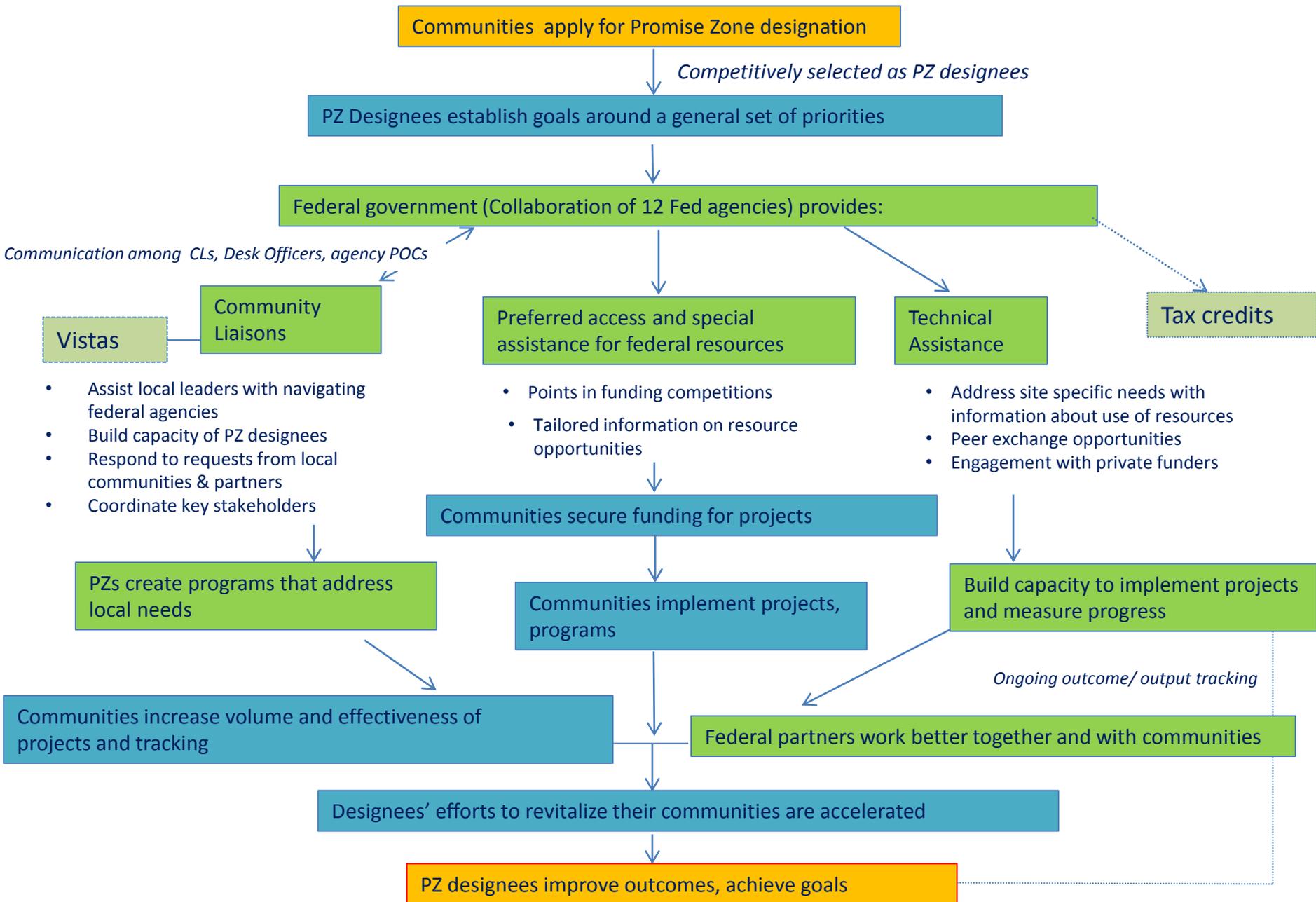
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# Characteristics of PZ Designees

|                                    |  |
|------------------------------------|--|
| <p><b>Number of Designees</b></p>  | <p><i><b>Total 22</b></i> Urban, rural, and tribal Promise Zones<br/>           Round 1 (2014): 5<br/>           Round 2 (2015): 8<br/>           Round 3 (2016): 9</p>  |
| <p><b>Designation Duration</b></p> | <p>10 Years</p>  |
| <p><b>Qualifying Criteria</b></p>  | <p><i><b>Contiguous geography</b></i> encompassing one or more census tract (exception: Tribal)</p>  |
|                                    | <p><i><b>Population:</b></i><br/>           Urban: 10,000 – 200,000<br/>           Rural/Tribal: Less than 200,000</p>   |
|                                    | <p><i><b>Overall poverty rate or Extremely Low Income Rate</b></i><br/>           Urban: At or above 33%<br/>           Rural/Tribal: At or above 20%;<br/>           PZ must contain one census tract at or above 30%</p> |
|                                    | <p><i><b>Local leadership (Mayor) must demonstrate support</b></i></p>   |



# Logic Model: Accelerating Local Progress (Promise Zone Initiative)



# Central Evaluation Question

- *“Does coordinated and collaborative federal government response in PZs catalyze the change needed to improve conditions across 5 policy domains?”*
  - Do indicators move and in the same direction across PZs?
  - What do we know about the local context that can be brought to bear on our understanding of “what works/don’t work”?”



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# Central Evaluation Question

(tough to answer)

## A few reasons:

- PZs are contiguous geographic units that vary by size (coverage and population) and do not align with other administrative boundaries
- PZ composition varies across zones (geography, population, poverty)
- Defining the interventions is not straightforward
  - Technical assistance
  - New funding resulting from preference points
  - Coordinated response across federal government funding streams
- Number of experimental sites is relatively small (21 PZs)



# Counterfactual: Why Do We Need It?

- Without a counterfactual, no basis for attributing impact or change to PZ initiative
  - Alternative explanations:
    - Changes would have happened anyway (natural improvement/regression over time)
    - Changes happened everywhere (overall changes in economy, etc.)
    - Changes due to some other event or intervention



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# Counterfactual: Challenges with PZs

- We don't have a large sample of PZ communities (target is the zone/neighborhood, not the individual)
- Even if we focus on individuals, we can't randomly assign people where to live, and we can't randomly assign PZs
- *With a large sample study, we could randomize units of analysis and assign the intervention*
  - *Make one group comparable to another, except for the intervention*



# How We Might Address The Challenge of Constructing a Counterfactual?

## Constraints:

- PZs have varying geographical characteristics in terms of size, jurisdictions:
  - **Small zones** (e.g., Philadelphia)
  - **Large zones within a city** (e.g., LA)
  - **Large urban zones at the scale of a city or larger** (e.g., St Louis)
  - **Rural:** South Carolina Low Country
  - **Tribal:** Pine Ridge Indian Reservation, SD



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# Possible Approaches to Identifying Comparison Zones

1. Use other applicants
  - But they weren't as high capacity/high quality → endogeneity
2. Use finalists... they're high quality!
  - Finalists are also receiving interventions → control contamination
  - Can't control for regional variation which could account for differences
3. Use other neighborhoods within a city – controls for regional variation
  - But PZs aren't real neighborhoods, they all cut across neighborhood boundaries
  - PZs have a complex mix of characteristics – not capturing the complete universe of possible tracts, so we don't know that this "Zone" is the best match to the PZ



# Possible Approaches to Identifying Comparison Zones

4. Generate universe of similarly sized geographies within a city, and then match on quantitative characteristics
  - More rigorous statistically matching approach but does not account for contextual differences between PZ and newly constructed comparison zones
  
5. Use approach #4 but consider using trained observers and systems researchers to assess comparison zones along local contextual factors
  - Strongest approach for small urban Zones, and other neighborhood-level place based initiatives



# Exploratory: Statistical Matched Zones within Philadelphia

1. Statistical approach for identifying areas similar to PZ
  - Create PZ sized districts
  - latent class analysis/principal components analysis (or propensity score matching – but not enough “cases”)
  - ID multiple comparison areas
2. Incorporate qualitative data (to capture non-quant components)
  - Use local expertise to match on qualitative attributes
  - Identify multiple comparison areas based on quantitative and qualitative characteristics – track data on these over time as counterfactual



# Step One: The Hard Part!

- **Create PZ-Sized Districts:** Identify ~9 Census tracts that will form the sample of possible comparison communities within Philadelphia
  - GeoDa data on neighbors of each Census tract – universe of all possible contiguous 9-Census tract areas meeting four constraints:
    - Fully contained within Philadelphia city
    - Not including any of the PZ
    - Not at all bordering the PZ
    - Not within .5mi of the PZ (or not second order neighbor of the PZ)
- Pruning heuristics to limit sample of areas:
  - Exclude areas where >50% of tracts have low poverty exposure
  - Exclude areas where 100% of tracts are middle or high poverty exposure
- What if there are still too many areas produced?
  - Employ random sampling techniques



# Step Two: Select Matches

- Two Approaches:
  1. Use latent class analysis/principal components analysis to identify class of areas similar to the Promise Zone, and average those as a comparison.
  2. Use propensity score matching to identify areas that best match the PZ, with opportunity indices and demographics as covariates. (way trickier given one PZ or even small number of tracts within the PZ)

**From this universe, we will select the best PZ matches.**



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# Step Three: Utilize Qualitative Methods

- Incorporate qualitative data to capture non-quantitative characteristics of PZ-ness
- Based on statistical matches, take the best comparison zones to local experts for feedback – a ‘ground-truth’ review on qualitative/contextual characteristics
  - collective efficacy, social cohesion, civic engagement, anchor institutions, and others



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# Final Product

- Comparison zones generated via assessment of *quantitative* and *qualitative* data
- Track data for PZs and their comparisons over time
  - Enables robust statistical techniques
    - Difference-in-difference
    - Comparative time series



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# Thank You!



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