

# ACS Content Review Phases I, II, and III Data Analysis Results

James Treat

September 23, 2014

# Objectives and Scope

---

- **Objectives:**
  - Use pre-specified, unbiased criteria to identify potential questions for removal (Phase I)
  - Obtain comprehensive understanding of ACS question uses, justification, and merit for potential revision or removal (Phase II & III)
- **Scope:** All questions (and subparts) currently on the 2013 ACS Questionnaire

# Project Phases

---

- **Phase I** – assess full survey content and identify questions for removal in 2016
- **Phase II** – assess availability of other sources and additional needs
- **Phase III** – research modifications to existing questions

# “Problematic” Topics Scored Well

---

Based on ICSP Subcommittee pre-specified criteria...

- Flush Toilets – High Benefit/Low Cost
- Disability – High Benefit/Low Cost
- Journey to Work – High Benefit/Low to High Cost
- Income – High Benefit/Low to High Cost (mostly High Cost)

# Weighting Approach

---

For each geographic level (Block Group/Tract, Place/County/MSA, State/Nation) we examined legal uses – Mandatory (M), Required (R), or Programmatic (P)

## Legal Definitions

- Mandatory – a federal law explicitly calls for use of decennial census or ACS data on that question
- Required – a federal law (or implementing regulation) explicitly requires the use of data and the decennial or the ACS is the historical source; or the data are needed for case law requirements imposed by the U.S. federal court system
- Programmatic – the data are needed for program planning, implementation, or evaluation and there is no explicit mandate or requirement

# Notional Weighting Example

|   | Mandatory Uses | Required Uses | Programmatic Uses |
|---|----------------|---------------|-------------------|
| Lowest Geographic Level is the Block Group or Tract | 0              | 0             | 1                 |
| Lowest Geographic Level is Place, County or MSA     | 1              | 1             | 0                 |
| Lowest Geographic Level is State or Nation          | 0              | 0             | 1                 |

# Design Criteria- Benefits Extract

| ACS Topic                         |    | Q# | Phase I Benefit Cluster Analysis |   |   |                        |   |   |                   |   |   |
|-----------------------------------|----|----|----------------------------------|---|---|------------------------|---|---|-------------------|---|---|
|                                   |    |    | Federal Data Uses                |   |   |                        |   |   |                   |   |   |
|                                   |    |    | Block Group/ Tract Level         |   |   | Place/County/MSA Level |   |   | State/Natl. Level |   |   |
|                                   |    |    | M                                | R | P | M                      | R | P | M                 | R | P |
| Building/Structure Type and Units | H1 | 5  | 5                                | 5 | 0 | 5                      | 5 | 0 | 5                 | 5 |   |
| Year Built                        | H2 | 5  | 5                                | 5 | 5 | 5                      | 5 | 5 | 0                 | 5 |   |
| Year Moved In                     | H3 | 5  | 0                                | 5 | 5 | 0                      | 5 | 0 | 0                 | 5 |   |
| Acreage                           | H4 | 0  | 5                                | 5 | 0 | 5                      | 5 | 0 | 0                 | 5 |   |
| Agriculture Sales                 | H5 | 0  | 0                                | 5 | 0 | 0                      | 5 | 5 | 0                 | 5 |   |

+

| Other Data Source | CV | IQR | Frame |
|-------------------|----|-----|-------|
| 5                 | 5  | 3   | 5     |
| 5                 | 5  | 1   | 0     |
| 3                 | 5  | 1   | 0     |
| 3                 | 5  | 5   | 0     |
| 1                 | 5  | 3   | 0     |

=

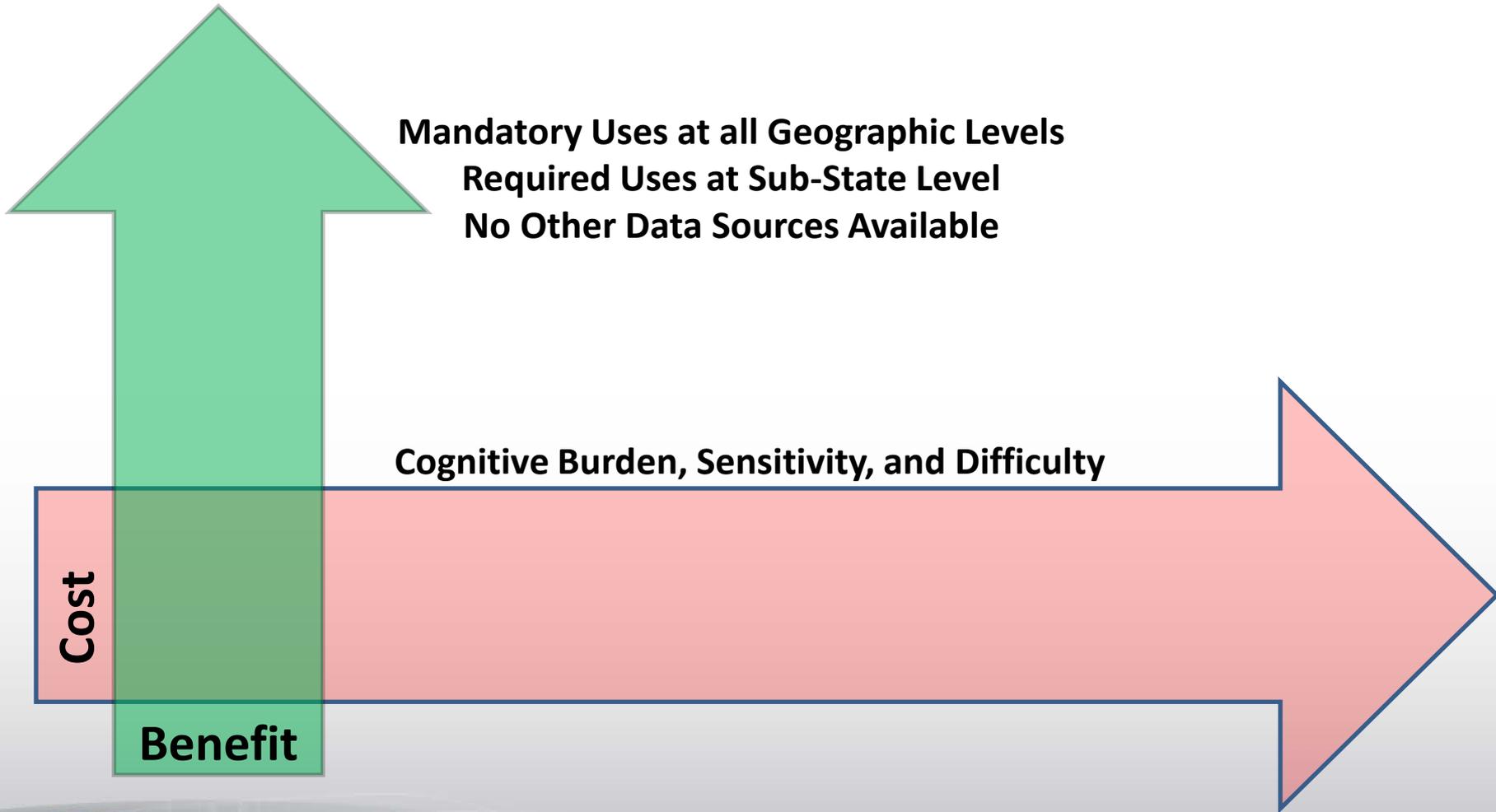
| Total Benefits |   |
|----------------|---|
| 78.45          | H |
| 80.60          | H |
| 57.99          | H |
| 52.17          | H |
| 37.78          | L |

# Design Criteria- Costs Extract

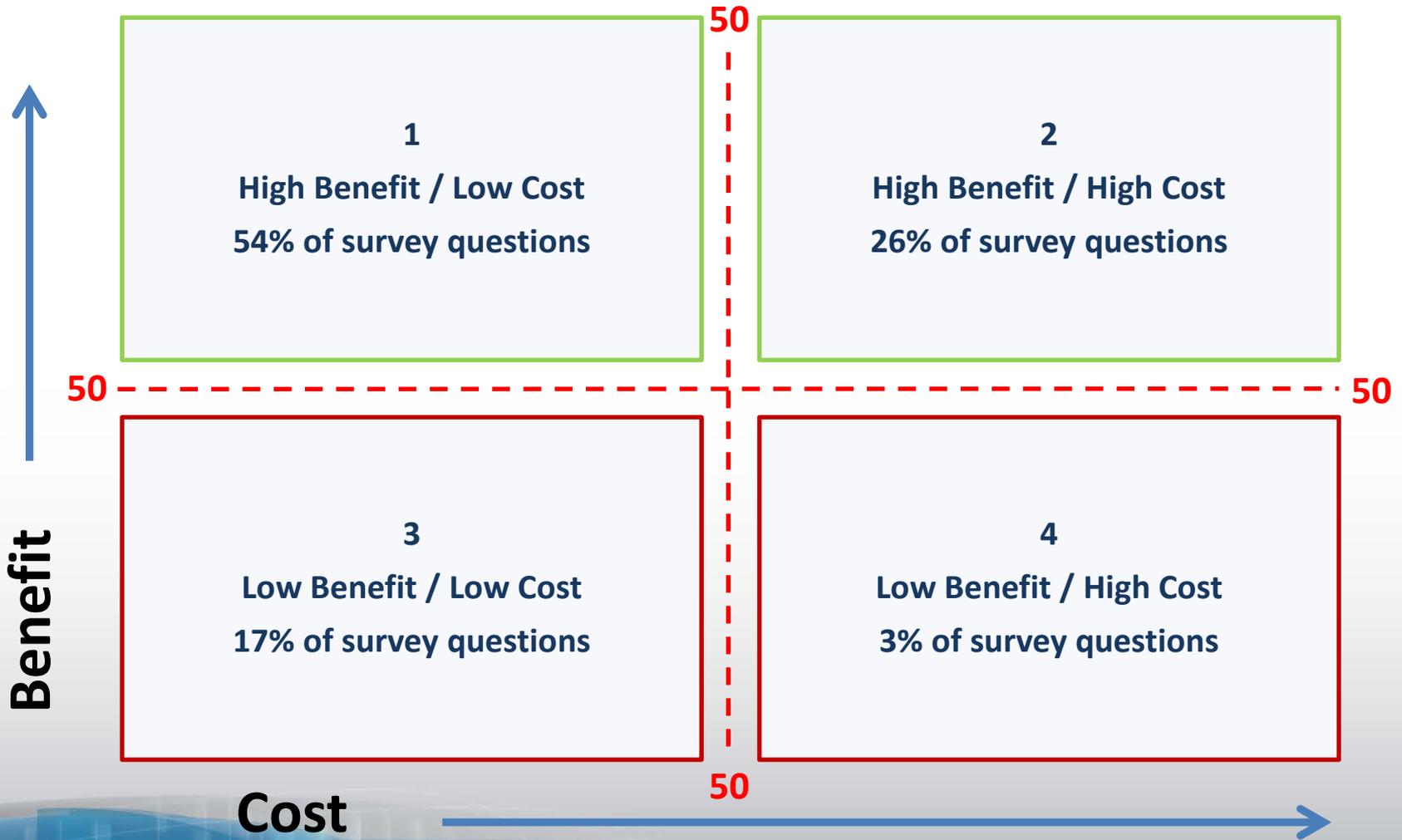
| ACS Topic                         | Int. Survey Cognitive Burden (Clusters) | Int. Survey Sensitivity (Clusters) | Int. Survey Overall Difficulty (Clusters) | Adjusted Median Seconds to Answer (Clusters) | Allocation Rates (Clusters) | Complaints (Clusters) |                    |
|-----------------------------------|---|------------------------------------|---|--|-----------------------------|-----------------------|--------------------|
| Building/Structure Type and Units | 3                                       | 1                                  | 1   | 3  | 1                           | 3                     | <b>Total Costs</b> |
| Year Built                        | 5                                       | 1                                  | 3   | 3  | 3                           | 3                     |                    |
| Year Moved In                     | 3                                       | 1                                  | 1   | 3  | 1                           | 3                     |                    |
| Acreage                           | 3                                       | 1                                  | 1   | 1  | 1                           | 3                     |                    |
| Agriculture Sales                 | 3                                       | 1                                  | 1   | 1  | 1                           | 3                     |                    |
|                                   |   |                                    |   |  |                             |                       | 37.00              |
|                                   |   |                                    |   |  |                             |                       | =                  |
|                                   |   |                                    |   |  |                             |                       | 60.40              |
|                                   |   |                                    |   |  |                             |                       | 37.00              |
|                                   |   |                                    |   |  |                             |                       | 33.00              |
|                                   |   |                                    |   |  |                             |                       | 33.00              |

# Driving Factors for Benefits and Costs

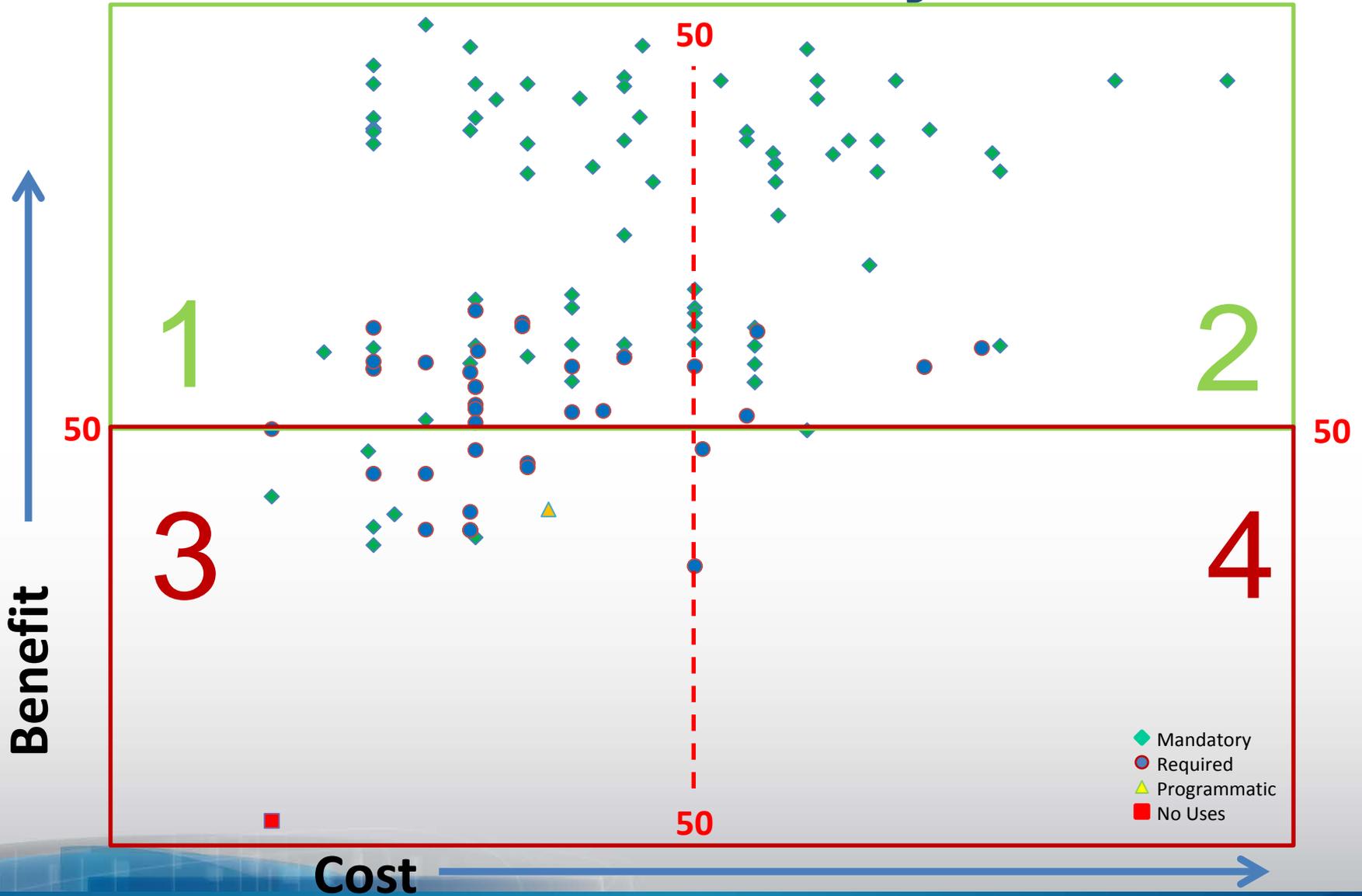
---



# Quadrant Analysis

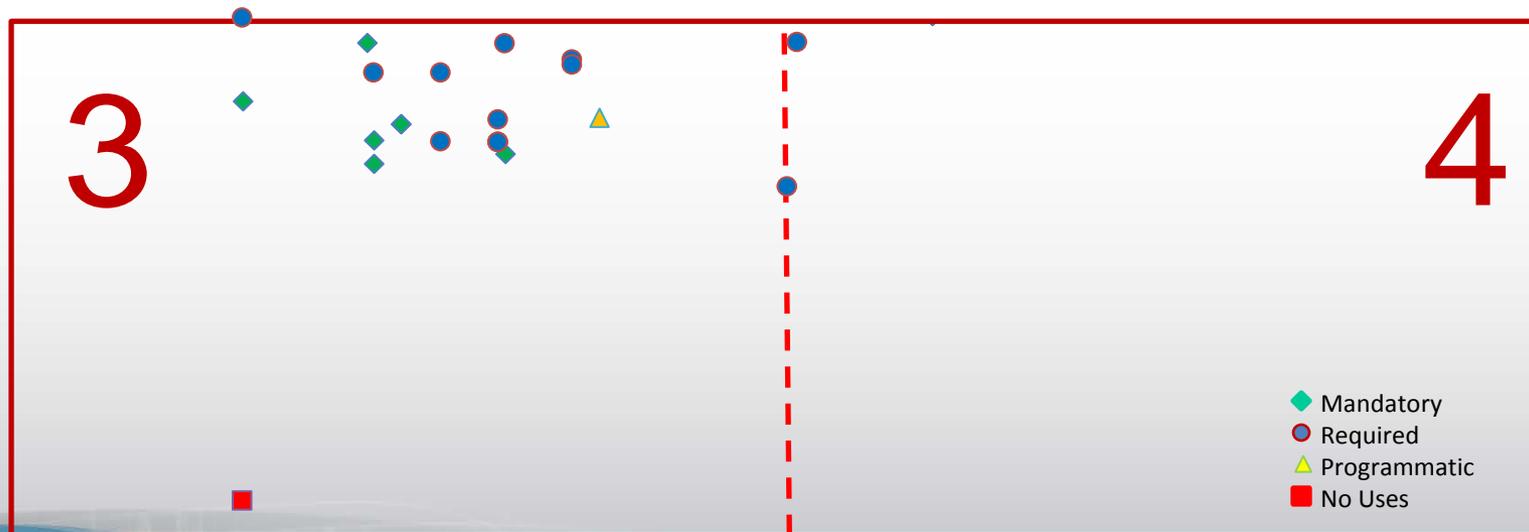


# Quadrant Analysis



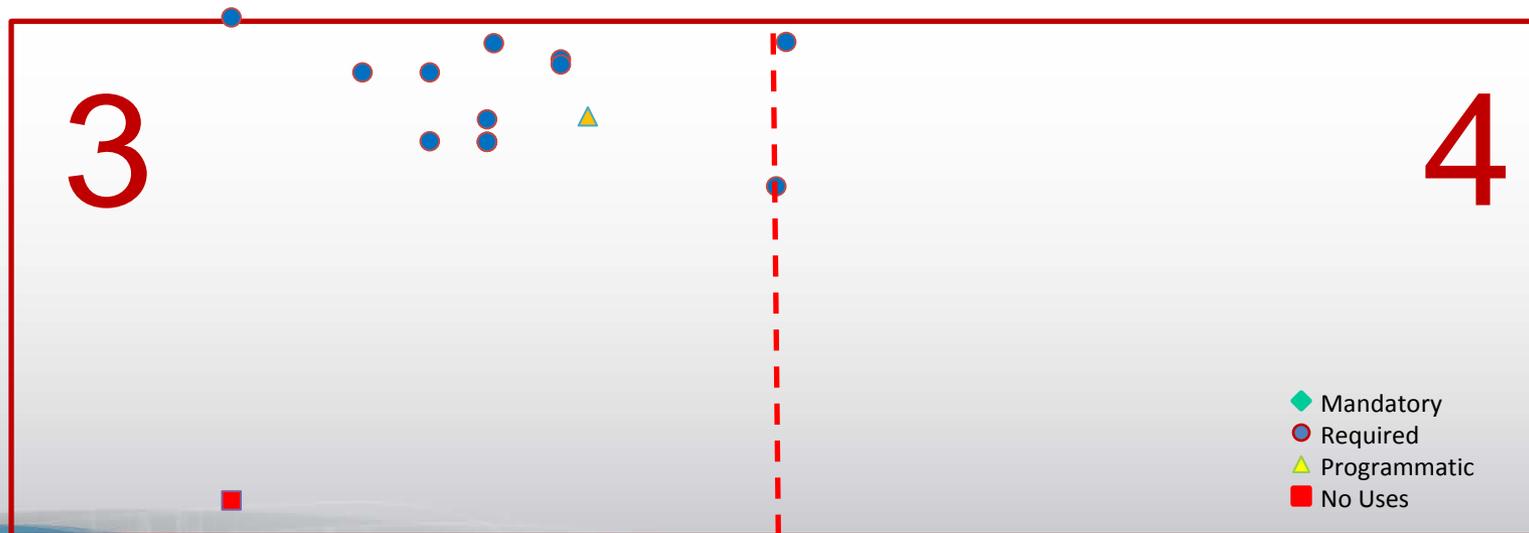
# Quadrants 3 & 4 Analysis

- Begin with full array of M, R, P, and X (no uses)
- Exclude M from consideration for removal
- Exclude R with Sub-state Uses from consideration for removal



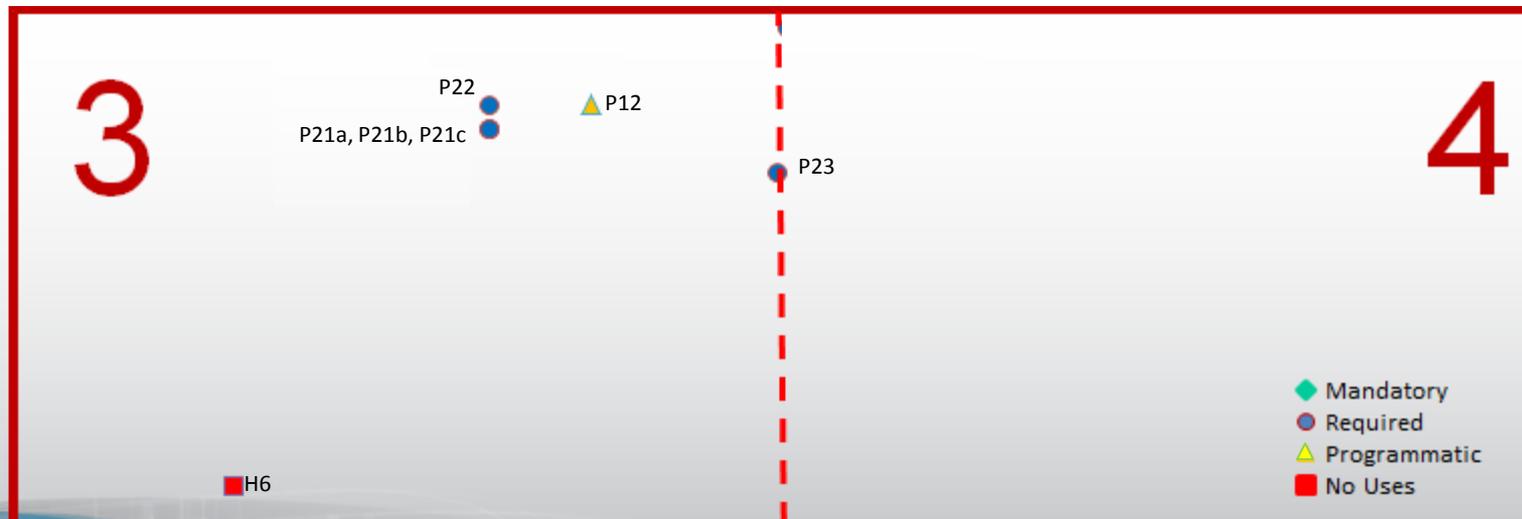
# Quadrants 3 & 4 Analysis

- Begin with full array of M, R, P, and X (no uses)
- Exclude M from consideration for removal
- Exclude R with Sub-state Uses from consideration for removal



# Quadrants 3 & 4 Analysis

- Begin with full array of M, R, P, and X (no uses)
- Exclude M from consideration for removal
- Exclude R with Sub-state Uses from consideration for removal



# Attributes of Candidates for Removal

| Attribute   | Agency Impacted/Comments   | Other Agencies with Programmatic Uses   |
|---|--|---|
| <b>No Uses</b>  |  |   |
| <ul style="list-style-type: none"> <li>H6 – Business/Medical Office on Property (X)</li> </ul>  | No current agency uses; supports comparative estimates   | N/A   |
| <b>No M and No R Uses</b>   |  |   |
| <ul style="list-style-type: none"> <li>P12 – Undergraduate Field of Degree (P)</li> </ul>   | NSF – used to target sampling frame for National Survey of College Graduates (NSCG); also supports STEM migration analyses | EPA, NTIA, HHS, DOL, DOT, EEOC  |
| <b>No M and No R Uses at Block Group/Tract Level or Place/County/MSA Level</b>  |  |   |
| <ul style="list-style-type: none"> <li>P21a – Get Married (R)</li> <li>P21b – Get Widowed (R)</li> <li>P21c – Get Divorced (R)</li> <li>P22 – Times Married (R)</li> <li>P23 – Year Last Married (R)</li> </ul> | SSA – State-level actuarial targeting  | FCC, NSF, HHS, EEOC<br>FCC, NSF, HHS, EEOC<br>FCC, NSF, HHS, EEOC<br>FCC, NSF, HHS<br>FCC, NSF, HHS |

# Phase I Decisions

| Action  | Date         |
|---|--------------|
| Brief Senior Management   |              |
| <ul style="list-style-type: none"> <li>• Associate Director for Demographic Programs</li> </ul> | 8/20/14 C    |
| <ul style="list-style-type: none"> <li>• Associate Director for 2020 Census</li> </ul>          | 8/22/14 C    |
| <ul style="list-style-type: none"> <li>• Deputy Director</li> </ul>                             | 8/25/14 C    |
| <ul style="list-style-type: none"> <li>• Director</li> </ul>                                    | 8/27/14 C    |
| <ul style="list-style-type: none"> <li>• Under Secretary</li> </ul>                             | 9/5/14 C     |
| <ul style="list-style-type: none"> <li>• Office of Management and Budget (OMB)</li> </ul>       | 9/15/14 C    |
| BOC or OMB sends results to ICSP Sub-Committee  | NLT 9/19/14  |
| BOC provides immediate “heads-up” to Participating Agencies                                     | NLT 9/23/14  |
| BOC completes Phase I documentation   | NLT 9/30/14  |
| BOC informs Congress of intent to publish Federal Register Notice                               | NLT 10/1/14  |
| BOC publishes Federal Register Notice   | NLT 10/15/14 |