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Creating the American Opportunity Study: A New Tool to Study Trends in Social Mobility

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Why Study Trends in Social Mobility?

- Long-standing commitment to free and open competition in the labor market
- Belief that opportunities to get ahead are widely available
- But massive changes in recent decades

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Why Study Trends in Social Mobility?

We are now asking

“to what extent do the conditions and circumstances of early life constrain success in adulthood?”

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Inadequate Tools to Study Social Mobility

- Longitudinal data is required
- Inadequate sample sizes in ongoing longitudinal surveys
- Last large-scale survey of social mobility was fielded in 1973
- Some recent work in using administrative data - Chetty, 2014

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Envisioning a New Tool

- Workshop in 2013 with subsequent planning meetings
- Special issue of the *Annals of the American Academy of political and Social Science*

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Envisioning a New Tool

- De facto intergenerational panel exists
 - the decennial censuses
 - potential to add depth by linking survey and administrative data
- Few users have linked components together

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American Opportunity Study

Project initiated by National Academies of Sciences, Engineering, and Medicine

- funding from the Carnegie Corp of New York
 - working with Census Bureau and universities
-
- Envisions linking on-demand for approved projects – no permanently stored, pre-linked database

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Census Infrastructure

- Census Bureau has initiated the Census Longitudinal Infrastructure Project (CLIP)
- PIKs have been assigned to
 - 2000 and 2010 Censuses
 - More recent surveys such as SIPP, CPS, ACS
 - Administrative data from federal and state sources

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American Opportunity Study

- Goals
 - Work within the CLIP infrastructure
 - Add the 1990 Census
 - Provide expertise to explore improved matching and linkage
 - Assist in identifying key longitudinal research opportunities

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All work involving census data and names is conducted within a Census facility by individuals who have been certified as sworn agents.

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1990 Census

- Names were handwritten on Census form but not captured electronically
- All other variables captured and available in microdata file
- Census forms exist on rolls of microfilm

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Step One – Scanning

- More than 120,000 reels of microfilm
 - ~62,000 for short form
 - ~62,000 for long form
- Using 2 microfilm scanners
- ~500 reels (same on each scanner)

Housed at Census National Processing Center in Jeffersonville, IN

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Step Two – Optical Character Recognition

- Optically read names from scanned pages
- Forms not designed to assist in optical reading of names
- Age and handwriting adds difficulty

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Person #
 Last Name
 First Name
 Middle Initial

PLEASE ALSO ANSWER HOUSING QUESTIONS ON PAGE 3

	PERSON 1	PERSON 2	PERSON 3	PERSON 4	PERSON 5	PERSON 6	
Please fill one column for each person listed in Question 1a on page 1.	Johnson	Clark	Rodriguez	Davis	Wilson	Smith	
is a person related ON 1?	Mike	Veronica	Perry	Ross	Jordan	Wallace	
is a relative of Person 1?	START IN THIS COLUMN WITH THE HOUSEHOLD MEMBER FOR ONE OF THE MEMBERS IN WHOSE NAME THE HOME IS OWNED, BEING BOUGHT, OR RENTED. If there is no such person, start in this column with any adult household member.	<input type="checkbox"/> Husband/wife <input type="checkbox"/> Natural-born or adopted son/daughter <input type="checkbox"/> Stepson/stepdaughter <input type="checkbox"/> Brother/sister <input type="checkbox"/> Father/mother or adopted son/daughter <input type="checkbox"/> Other relative	<input type="checkbox"/> Husband/wife <input type="checkbox"/> Natural-born or adopted son/daughter <input type="checkbox"/> Stepson/stepdaughter <input type="checkbox"/> Brother/sister <input type="checkbox"/> Father/mother or adopted son/daughter <input type="checkbox"/> Other relative	<input type="checkbox"/> Husband/wife <input type="checkbox"/> Natural-born or adopted son/daughter <input type="checkbox"/> Stepson/stepdaughter <input type="checkbox"/> Brother/sister <input type="checkbox"/> Father/mother or adopted son/daughter <input type="checkbox"/> Other relative	<input type="checkbox"/> Husband/wife <input type="checkbox"/> Natural-born or adopted son/daughter <input type="checkbox"/> Stepson/stepdaughter <input type="checkbox"/> Brother/sister <input type="checkbox"/> Father/mother or adopted son/daughter <input type="checkbox"/> Other relative	<input type="checkbox"/> Husband/wife <input type="checkbox"/> Natural-born or adopted son/daughter <input type="checkbox"/> Stepson/stepdaughter <input type="checkbox"/> Brother/sister <input type="checkbox"/> Father/mother or adopted son/daughter <input type="checkbox"/> Other relative	<input type="checkbox"/> Husband/wife <input type="checkbox"/> Natural-born or adopted son/daughter <input type="checkbox"/> Stepson/stepdaughter <input type="checkbox"/> Brother/sister <input type="checkbox"/> Father/mother or adopted son/daughter <input type="checkbox"/> Other relative
is NOT RELATED to Person 1?	<input type="checkbox"/> Roomer, boarder, or foster child <input type="checkbox"/> Housemate, roommate <input type="checkbox"/> Unmarried partner <input type="checkbox"/> Other nonrelative	<input type="checkbox"/> Roomer, boarder, or foster child <input type="checkbox"/> Housemate, roommate <input type="checkbox"/> Unmarried partner <input type="checkbox"/> Other nonrelative	<input type="checkbox"/> Roomer, boarder, or foster child <input type="checkbox"/> Housemate, roommate <input type="checkbox"/> Unmarried partner <input type="checkbox"/> Other nonrelative	<input type="checkbox"/> Roomer, boarder, or foster child <input type="checkbox"/> Housemate, roommate <input type="checkbox"/> Unmarried partner <input type="checkbox"/> Other nonrelative	<input type="checkbox"/> Roomer, boarder, or foster child <input type="checkbox"/> Housemate, roommate <input type="checkbox"/> Unmarried partner <input type="checkbox"/> Other nonrelative	<input type="checkbox"/> Roomer, boarder, or foster child <input type="checkbox"/> Housemate, roommate <input type="checkbox"/> Unmarried partner <input type="checkbox"/> Other nonrelative	
is Male	<input type="checkbox"/> Male <input type="checkbox"/> Female	<input type="checkbox"/> Male <input type="checkbox"/> Female	<input type="checkbox"/> Male <input type="checkbox"/> Female	<input type="checkbox"/> Male <input type="checkbox"/> Female	<input type="checkbox"/> Male <input type="checkbox"/> Female	<input type="checkbox"/> Male <input type="checkbox"/> Female	
is the race that the person himself/herself to be an (Amer.), print the name of the enrolled or principal tribe?	<input type="checkbox"/> White <input type="checkbox"/> Black or Negro <input type="checkbox"/> Indian (Amer.) (Print the name of the enrolled or principal tribe.) <input type="checkbox"/> Eskimo <input type="checkbox"/> Aleut <input type="checkbox"/> Asian or Pacific Islander (API) <input type="checkbox"/> Chinese <input type="checkbox"/> Filipino <input type="checkbox"/> Hawaiian <input type="checkbox"/> Japanese <input type="checkbox"/> Korean <input type="checkbox"/> Samoan <input type="checkbox"/> Vietnamese <input type="checkbox"/> Other API	<input type="checkbox"/> White <input type="checkbox"/> Black or Negro <input type="checkbox"/> Indian (Amer.) (Print the name of the enrolled or principal tribe.) <input type="checkbox"/> Eskimo <input type="checkbox"/> Aleut <input type="checkbox"/> Asian or Pacific Islander (API) <input type="checkbox"/> Chinese <input type="checkbox"/> Filipino <input type="checkbox"/> Hawaiian <input type="checkbox"/> Japanese <input type="checkbox"/> Korean <input type="checkbox"/> Samoan <input type="checkbox"/> Vietnamese <input type="checkbox"/> Other API	<input type="checkbox"/> White <input type="checkbox"/> Black or Negro <input type="checkbox"/> Indian (Amer.) (Print the name of the enrolled or principal tribe.) <input type="checkbox"/> Eskimo <input type="checkbox"/> Aleut <input type="checkbox"/> Asian or Pacific Islander (API) <input type="checkbox"/> Chinese <input type="checkbox"/> Filipino <input type="checkbox"/> Hawaiian <input type="checkbox"/> Japanese <input type="checkbox"/> Korean <input type="checkbox"/> Samoan <input type="checkbox"/> Vietnamese <input type="checkbox"/> Other API	<input type="checkbox"/> White <input type="checkbox"/> Black or Negro <input type="checkbox"/> Indian (Amer.) (Print the name of the enrolled or principal tribe.) <input type="checkbox"/> Eskimo <input type="checkbox"/> Aleut <input type="checkbox"/> Asian or Pacific Islander (API) <input type="checkbox"/> Chinese <input type="checkbox"/> Filipino <input type="checkbox"/> Hawaiian <input type="checkbox"/> Japanese <input type="checkbox"/> Korean <input type="checkbox"/> Samoan <input type="checkbox"/> Vietnamese <input type="checkbox"/> Other API	<input type="checkbox"/> White <input type="checkbox"/> Black or Negro <input type="checkbox"/> Indian (Amer.) (Print the name of the enrolled or principal tribe.) <input type="checkbox"/> Eskimo <input type="checkbox"/> Aleut <input type="checkbox"/> Asian or Pacific Islander (API) <input type="checkbox"/> Chinese <input type="checkbox"/> Filipino <input type="checkbox"/> Hawaiian <input type="checkbox"/> Japanese <input type="checkbox"/> Korean <input type="checkbox"/> Samoan <input type="checkbox"/> Vietnamese <input type="checkbox"/> Other API	<input type="checkbox"/> White <input type="checkbox"/> Black or Negro <input type="checkbox"/> Indian (Amer.) (Print the name of the enrolled or principal tribe.) <input type="checkbox"/> Eskimo <input type="checkbox"/> Aleut <input type="checkbox"/> Asian or Pacific Islander (API) <input type="checkbox"/> Chinese <input type="checkbox"/> Filipino <input type="checkbox"/> Hawaiian <input type="checkbox"/> Japanese <input type="checkbox"/> Korean <input type="checkbox"/> Samoan <input type="checkbox"/> Vietnamese <input type="checkbox"/> Other API	<input type="checkbox"/> White <input type="checkbox"/> Black or Negro <input type="checkbox"/> Indian (Amer.) (Print the name of the enrolled or principal tribe.) <input type="checkbox"/> Eskimo <input type="checkbox"/> Aleut <input type="checkbox"/> Asian or Pacific Islander (API) <input type="checkbox"/> Chinese <input type="checkbox"/> Filipino <input type="checkbox"/> Hawaiian <input type="checkbox"/> Japanese <input type="checkbox"/> Korean <input type="checkbox"/> Samoan <input type="checkbox"/> Vietnamese <input type="checkbox"/> Other API
is Asian or Pacific Islander (API) group, for example: Hmong, Laotian, Thai, Tongan, Pakistani, Indian, and so on.	<input type="checkbox"/> Chinese <input type="checkbox"/> Filipino <input type="checkbox"/> Hawaiian <input type="checkbox"/> Japanese <input type="checkbox"/> Korean <input type="checkbox"/> Samoan <input type="checkbox"/> Vietnamese <input type="checkbox"/> Other API	<input type="checkbox"/> Chinese <input type="checkbox"/> Filipino <input type="checkbox"/> Hawaiian <input type="checkbox"/> Japanese <input type="checkbox"/> Korean <input type="checkbox"/> Samoan <input type="checkbox"/> Vietnamese <input type="checkbox"/> Other API	<input type="checkbox"/> Chinese <input type="checkbox"/> Filipino <input type="checkbox"/> Hawaiian <input type="checkbox"/> Japanese <input type="checkbox"/> Korean <input type="checkbox"/> Samoan <input type="checkbox"/> Vietnamese <input type="checkbox"/> Other API	<input type="checkbox"/> Chinese <input type="checkbox"/> Filipino <input type="checkbox"/> Hawaiian <input type="checkbox"/> Japanese <input type="checkbox"/> Korean <input type="checkbox"/> Samoan <input type="checkbox"/> Vietnamese <input type="checkbox"/> Other API	<input type="checkbox"/> Chinese <input type="checkbox"/> Filipino <input type="checkbox"/> Hawaiian <input type="checkbox"/> Japanese <input type="checkbox"/> Korean <input type="checkbox"/> Samoan <input type="checkbox"/> Vietnamese <input type="checkbox"/> Other API	<input type="checkbox"/> Chinese <input type="checkbox"/> Filipino <input type="checkbox"/> Hawaiian <input type="checkbox"/> Japanese <input type="checkbox"/> Korean <input type="checkbox"/> Samoan <input type="checkbox"/> Vietnamese <input type="checkbox"/> Other API	
is Other race (Print race)	Other race (Print race)	Other race (Print race)	Other race (Print race)	Other race (Print race)	Other race (Print race)	Other race (Print race)	
is Age	Age	Age	Age	Age	Age	Age	
is Year of birth	Year of birth	Year of birth	Year of birth	Year of birth	Year of birth	Year of birth	
is Now married	<input type="checkbox"/> Now married <input type="checkbox"/> Widowed <input type="checkbox"/> Divorced	<input type="checkbox"/> Now married <input type="checkbox"/> Widowed <input type="checkbox"/> Divorced	<input type="checkbox"/> Now married <input type="checkbox"/> Widowed <input type="checkbox"/> Divorced	<input type="checkbox"/> Now married <input type="checkbox"/> Widowed <input type="checkbox"/> Divorced	<input type="checkbox"/> Now married <input type="checkbox"/> Widowed <input type="checkbox"/> Divorced	<input type="checkbox"/> Now married <input type="checkbox"/> Widowed <input type="checkbox"/> Divorced	
is No (not Spanish/Hispanic)	<input type="checkbox"/> No (not Spanish/Hispanic) <input type="checkbox"/> Yes, Mexican, Mexican-Am., Chicano <input type="checkbox"/> Yes, Puerto Rican <input type="checkbox"/> Yes, Cuban <input type="checkbox"/> Yes, other Spanish/Hispanic (Print one group, for example: Argentinian, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on.)	<input type="checkbox"/> No (not Spanish/Hispanic) <input type="checkbox"/> Yes, Mexican, Mexican-Am., Chicano <input type="checkbox"/> Yes, Puerto Rican <input type="checkbox"/> Yes, Cuban <input type="checkbox"/> Yes, other Spanish/Hispanic (Print one group, for example: Argentinian, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on.)	<input type="checkbox"/> No (not Spanish/Hispanic) <input type="checkbox"/> Yes, Mexican, Mexican-Am., Chicano <input type="checkbox"/> Yes, Puerto Rican <input type="checkbox"/> Yes, Cuban <input type="checkbox"/> Yes, other Spanish/Hispanic (Print one group, for example: Argentinian, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on.)	<input type="checkbox"/> No (not Spanish/Hispanic) <input type="checkbox"/> Yes, Mexican, Mexican-Am., Chicano <input type="checkbox"/> Yes, Puerto Rican <input type="checkbox"/> Yes, Cuban <input type="checkbox"/> Yes, other Spanish/Hispanic (Print one group, for example: Argentinian, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on.)	<input type="checkbox"/> No (not Spanish/Hispanic) <input type="checkbox"/> Yes, Mexican, Mexican-Am., Chicano <input type="checkbox"/> Yes, Puerto Rican <input type="checkbox"/> Yes, Cuban <input type="checkbox"/> Yes, other Spanish/Hispanic (Print one group, for example: Argentinian, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on.)	<input type="checkbox"/> No (not Spanish/Hispanic) <input type="checkbox"/> Yes, Mexican, Mexican-Am., Chicano <input type="checkbox"/> Yes, Puerto Rican <input type="checkbox"/> Yes, Cuban <input type="checkbox"/> Yes, other Spanish/Hispanic (Print one group, for example: Argentinian, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on.)	
is Other Spanish/Hispanic group	Other Spanish/Hispanic group	Other Spanish/Hispanic group	Other Spanish/Hispanic group	Other Spanish/Hispanic group	Other Spanish/Hispanic group	Other Spanish/Hispanic group	
FOR CENSUS USE		2822 503 1815					

181 / 497, 241

11-digit Household ID

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- Working with vendors
- Matching first name to “known first names” and last name to “known last names”
- Retaining multiple possible matches
- Census Bureau created a dictionary of names to generate the match probabilities

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Step Three – PIK, Match & Link

- Append PIKs to 1990 names using Census Bureau methodology
- Match and link names across censuses using the PIK identifier

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Beyond the 1990 Census

- Experiment with alternative linkage and matching methodology
- Identify broad range of uses
- Generate excitement and support

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More to come!!

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