

Identifying Low Income Households for Transit

Statewide Transportation Improvement Fund

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AGENDA / CONTENTS



Overview



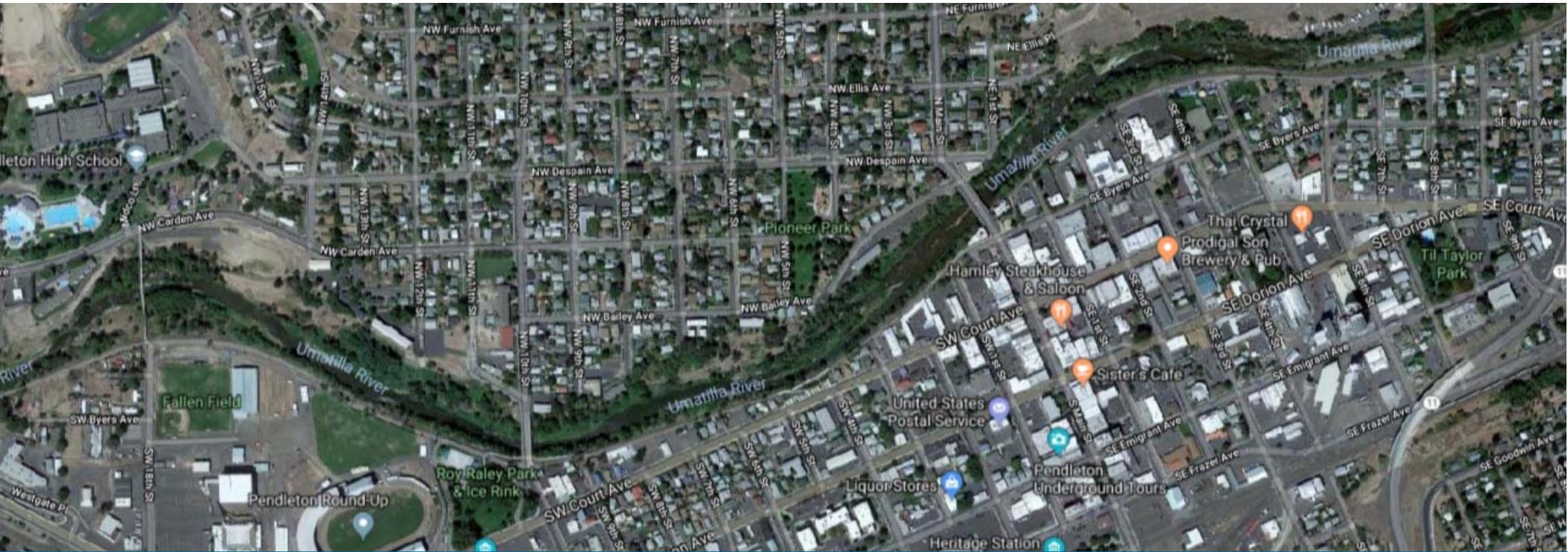
Resources



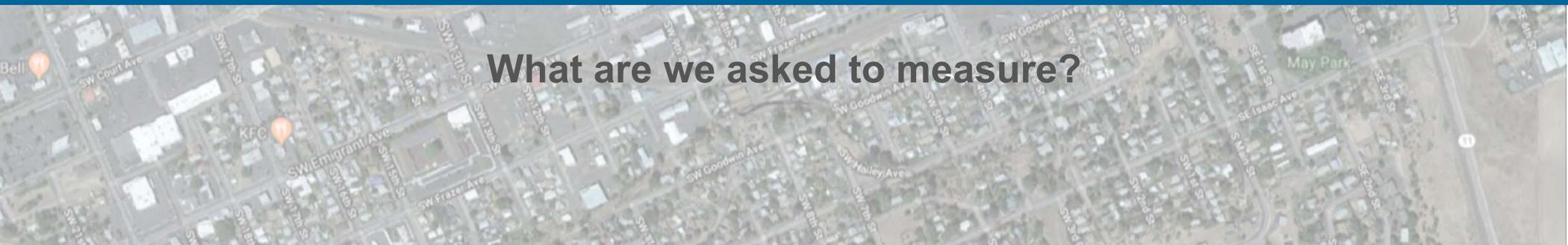
Data Analysis
Examples



Questions
Answers



OVERVIEW



What are we asked to measure?

STIF REQUIREMENTS

Oregon Administrative Rules

Definitions

- 732-040-0005(15) “Low Income Household” means a household the total income of which **does not exceed 200% of the poverty guidelines** updated periodically in the Federal Register by the U.S. Department of Health and Human Services under the authority of 42 U.S.C. 9902(2) for the 48 contiguous States and the District of Columbia.

STIF REQUIREMENTS

Oregon Administrative Rules

STIF Plan Contents

- 732-042-0015(1)(e) The STIF Plan must contain an explanation of how the plan defines and identifies communities with a **high percentage of Low-Income Households**.
- 732-042-0015(3)(c) Anticipated benefits and **discrete measurable outcomes** associated with each Project with specific reference to[...]communities with a high percentage of Low-Income Households

STIF REQUIREMENTS

Oregon Administrative Rules

STIF Discretionary and Intercommunity Funds

- 732-044-0030(1) The Commission's investment priorities are: (a) Improvement of Public Transportation Service to **Low-Income Households**...

STIF REQUIREMENTS

How Low-Income Household data is used

Advisory Committee Bylaws

- Definition of high percentage of Low-Income Households to **inform project selection**

Local Plan

- **Current and future conditions analysis** that includes locations of Low-Income Households to inform service planning

STIF REQUIREMENTS

How Low-Income Household data is used

Formula Fund Allocations & Advisory Committee Project Selection Criteria

- **Increase in frequency of bus service** to communities with a high percentage of Low-Income Households
- **Expand bus routes and services** to service communities with a high percentage of Low-Income Households
- **Reduce fares** in communities with a high percentage of Low-Income Households

STIF REQUIREMENTS

How Low-Income Household data is used

Measureable Outcomes

- **Number of** low income households served
- Annual report on **actions taken to mitigate the tax impacts** of passengers in low-income communities

factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t

United States Census Bureau

AMERICAN FactFinder

Feedback FAC

MAIN COMMUNITY FACTS GUIDED SEARCH **ADVANCED SEARCH** DOWNLOAD CENTER

Search - Use the options on the left (topics, geographies, ...) to narrow your search

Your Selections

'Your Selections' is empty

load search | save search

Search using the options below:

Topics (age, income, year, dataset, ...)

Geographies (states, counties, places, ...)

Race and Ethnic Groups (race, ancestry, tribe)

Industry Codes (NAICS industry, ...)

550 Geographies Codes

To search for tables and other files in American FactFinder:

1 Enter search terms and an optional geography and click **Search**.

topic or table name state, county or place

topics
 race/ancestry
 industries
 occupations

-- or --

Select from **Topics, Race and Ethnic Groups, Industries, and Occupations**.

- these are added to 'Your Selections'
- the Search Results are updated

2 Next, select **Geographies** (states, counties, cities, towns, or zip codes).

- these are added to 'Your Selections'

Oregon Transit Agencies

List of Agencies:

01. Albany Transit System
02. Amtrak Cascades
03. Basin Transit Service
04. Benton County Transportation
05. Blue Star Bus
06. Bolt Bus Oregon
07. Canby Area Transit
08. Caravan Airport, Transportation
09. Cascades East Transit
10. Cascade Bus

Barview

Pop & Jobs

A combined map visualization, showing both population and jobs. American Community Survey, 2014; LHD 2015

20000

15000

10000

5000

0

Population

DATA RESOURCES

What do I use to identify low income communities?

DATA RESOURCES

Poverty and high percentage thresholds

- Low-Income Households = 200% of federal guidelines level or below
- High percentage = Threshold determined by Qualified Entity

Example

- **District- or County-wide average:** use to evaluate block groups or other sub-area
- **Statewide average:** use to evaluate county service area

DATA RESOURCES

Poverty guidelines

- A.K.A. federal poverty level
- U.S. Department of Health and Human Services
- Annual updates
- By household size

HHS POVERTY GUIDELINES FOR 2018

The 2018 poverty guidelines are in effect as of January 13, 2018.

See also the [Federal Register notice of the 2018 poverty guidelines](#), published January 18, 2018

2018 POVERTY GUIDELINES FOR THE 48 CONTIGUOUS STATES AND THE DISTRICT OF COLUMBIA

PERSONS IN FAMILY/HOUSEHOLD	POVERTY GUIDELINE
For families/households with more than 8 persons, add \$4,320 for each additional person.	
1	\$12,140
2	\$16,460
3	\$20,780
4	\$25,100
5	\$29,420
6	\$33,740
7	\$38,060
8	\$42,380

EXAMPLE

Poverty and high percentage thresholds

Example

- Make-Believe Transit District: Low-Income Households = 30%
- High percentage Low-Income Households threshold = 30%
- Planning uses:
 - District identifies (maps) block groups or communities below threshold
 - Target services to these areas
- STIF reporting:
 - Number of Low-Income Households served

DATA RESOURCES

Online tools

Resource	Functions	I want to...
U.S. Census / American Factfinder	<ul style="list-style-type: none">• See/get data tables• Get raw data• Specify small-scale geography	<ul style="list-style-type: none">• see a table of the number of low income households for cities, counties, and the state.• download demographic data to use in GIS.
Remix – Planning	<ul style="list-style-type: none">• Draw routes and stops• See demographic data maps• Get route specific data (+ Title VI Engine)	<ul style="list-style-type: none">• analyze population near a new route (stops).• look at maps of demographic data.

DATA RESOURCES

US Census American FactFinder: <https://factfinder.census.gov/>

- American Community Survey
- 5-year estimates
- Most recent today: 2016

The screenshot displays the American FactFinder search interface. The browser address bar shows the URL: factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t&keepList=t. The page features the United States Census Bureau logo and the "AMERICAN FactFinder" title. A navigation bar includes links for MAIN, COMMUNITY FACTS, GUIDED SEARCH, ADVANCED SEARCH (highlighted), and DOWNLOAD CENTER. Below the navigation bar, a search instruction reads: "Search - Use the options on the left (topics, geographies, ...) to narrow your search results".

On the left side, there is a "Your Selections" section indicating that no selections have been made. Below this, a section titled "Search using the options below:" lists several categories with expandable arrows: Topics (age, income, year, dataset, ...), Geographies (states, counties, places, ...), Race and Ethnic Groups (race, ancestry, tribe), Industry Codes (NAICS industry, ...), and EEO Occupation Codes (executives, analysts, ...).

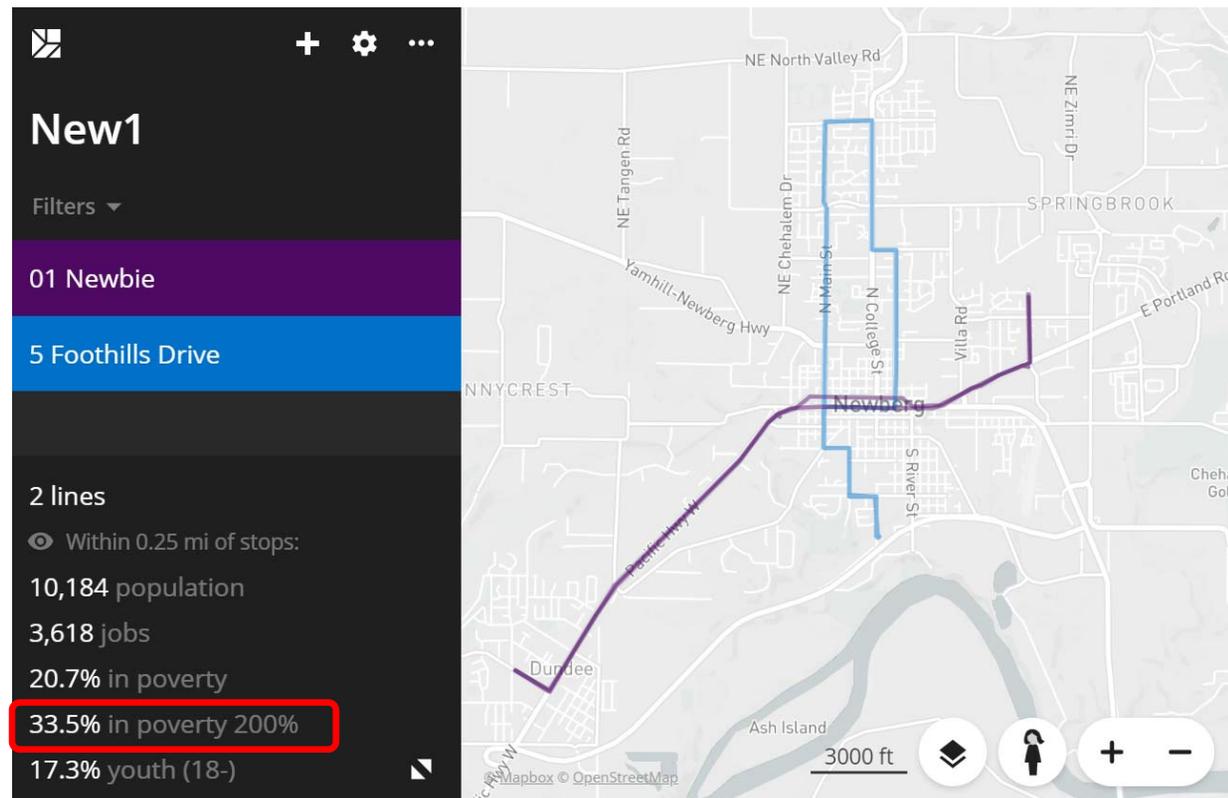
The main search area contains a "To search for tables and other files in American FactFinder:" section. It includes a numbered step 1: "Enter search terms and an optional geography and click GO". A search form is shown with the following fields: "topic or table name" containing "c17002", "state, county or place (optional)" containing "Baker County, Oregon", and a "GO" button. A dropdown menu is open, showing search results: "C17002: RATIO OF INCOME IN THE PAST 12 MONTHS TO POVERTY LEVEL" and "C17002: RATIO OF INCOME TO POVERTY LEVEL IN THE PAST 12 MONTHS". Below the dropdown, instructions state: "Select from Topics, Race and Ethnic Groups, Industry Codes, EEO Occupation Codes." and list that these are added to 'Your Selections' and the search results are updated.

Step 2: "Next, select Geographies (states, counties, cities, towns, etc.)" with similar instructions. Step 3: "Select one or more Search Results and click View".

DATA RESOURCES

Remix Public Transportation: <https://platform.remix.com/>

- Open to most Oregon agencies
- Census American Community Survey data
- Low income metrics



DATA RESOURCES

Local Plans

- Transportation, transit, housing, economic development
- Check low-income definitions
- Future plans consistency

Figure 2-2 Demographic Information on Clatsop County Communities, 2013

Geography	Total Population	% of County	Older Adults (65+)	Youth (10-17)	Low-Income Population [1]	Zero-Vehicle Households	Population with Disabilities [2]	Population with Limited English [3]
United States	311,536,594	-	13%	11%	32%	9%	15%	4.5%
Oregon	3,868,721	-	14%	10%	33%	8%	16%	3.5%
Clatsop County	37,157	-	18%	9%	36%	9%	21%	1.7%
Incorporated Communities								
Astoria	9,518	26%	17%	9%	41%	9%	18%	2.8%
Seaside	6,455	17%	18%	8%	39%	18%	26%	1.3%
Warrenton	5,057	14%	12%	11%	42%	8%	23%	0.3%
Cannon Beach	1,553	4%	26%	4%	37%	12%	23%	4.4%
Gearhart	1,513	4%	22%	12%	22%	2%	17%	0.3%

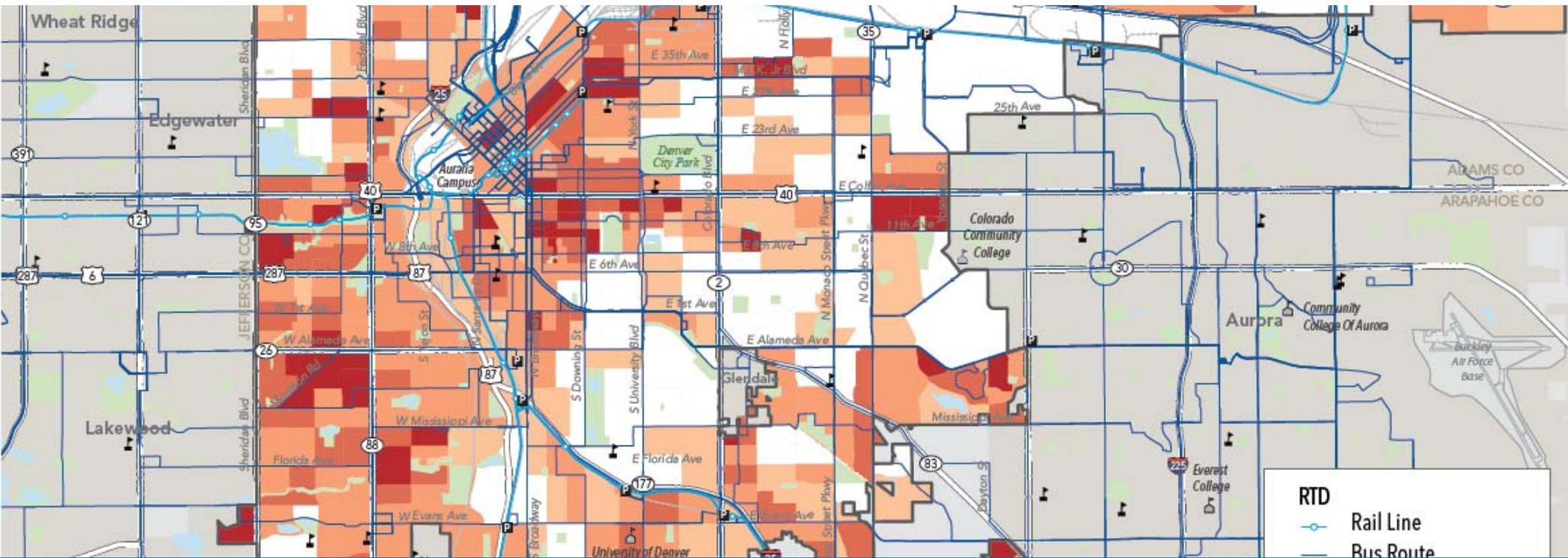
Note: The table presents data from all cities within Clatsop County. Low-Income populations are defined by households making up to 185% of the poverty level. This definition is consistent with Oregon WIC Policy 612. [1] Percentage of population for which poverty status is determined. [2] Age 18 or older. [3] Age 5 or older who speak English "less than well".

Source: U.S. Census Bureau, 2009-13 American Community Survey 5-year Estimates

DATA RESOURCES

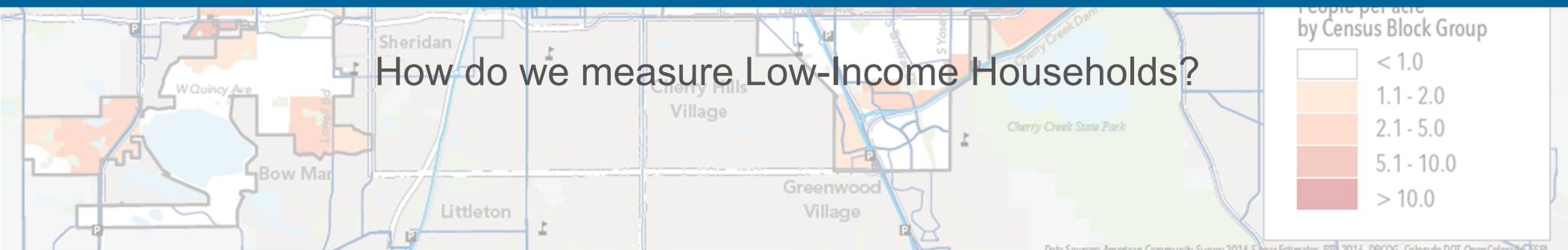
Online tools

Resource	Functions	I want to...
ODOT TransGIS	<ul style="list-style-type: none">• See map of bus routes and stops	<ul style="list-style-type: none">• see bus stops, ACTs, or transport facilities on a map.
ODOT Transit Network Analysis	<ul style="list-style-type: none">• See map of bus routes and stops	<ul style="list-style-type: none">• see bus stops on a map.• see population on a map.
U.S. Federal Poverty Guidelines	<ul style="list-style-type: none">• See poverty guidelines (levels) by family size	<ul style="list-style-type: none">• calculate data manually.• create program eligibility level.



ANALYSIS

How do we measure Low-Income Households?



ANALYSIS

Approach 1: Dispersed (characteristic) community

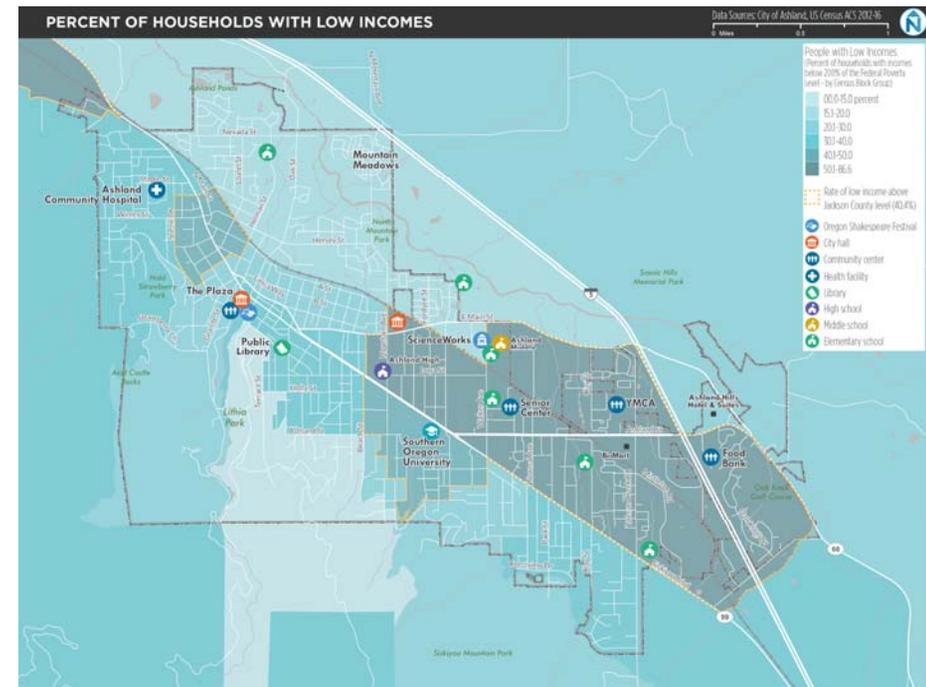
- A group with a high percentage Low-Income Households
- Examples
 - Tribal members
 - Transient employees
 - Transit riders
- Methods
 - Survey (e.g. on-board)
 - Census (e.g. region, state, national scale)

Measure	Group	Oregon
Total Households	10,000	3,905,000
Low-Income Households	6,000	544,000
Ratio	60%	35%

ANALYSIS

Approach 2: Geography based community

- Geographic area with high percentage of Low-Income Households
- Examples:
 - County-wide dial-a-ride service area
 - Census blocks or tracts within ¼ mile of transit stops
- Methods
 - Census tables
 - Remix (using Census)
 - GIS
 - Transit plans



ANALYSIS

Examples of other equity analysis data

OPAL Environmental Justice Oregon

- Access to a car (0-vehicle)
- Housing & transportation burden
- Families receiving section 8 housing
- Title I schools
- Students on free or low cost school lunches.
- Households receiving Medicaid(/care)
- Immigrants/refugees
- People of color
- SNAP program participants

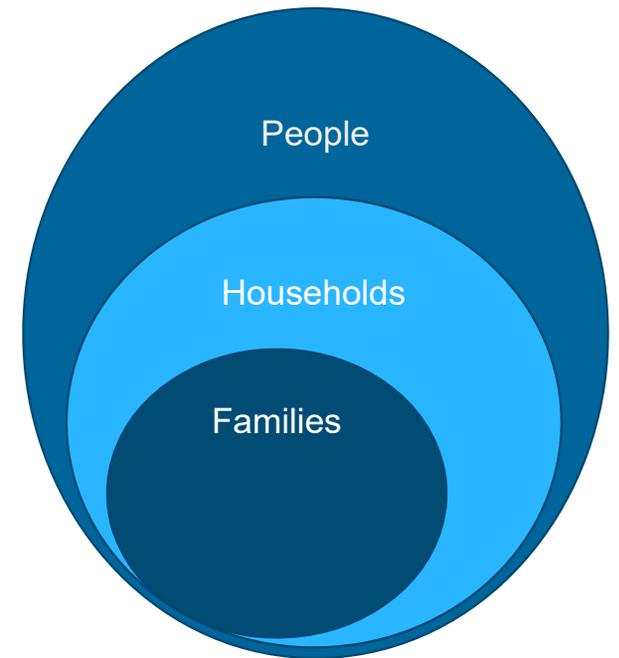
TriMet Transit Equity Index

- Minority population
- Low-income population
- Limited English Proficiency (LEP)
- Senior population
- Youth population
- People with disabilities
- Limited vehicle access households
- Low and medium wage jobs
- Affordable housing units
- Key retail/human/social services

OVERVIEW

Census Households, Families, and People

Metric	Households	Families	People
100% Poverty	✓	✓	✓
200% Poverty		✓	✓



POPULATION TO HOUSEHOLDS

Conversions

- October 2018 Guidelines: 2 methods
- Bridging Census data, OARs, and legislation
- Use with *population* data already evaluated, at any level
- Do not use *families* data
- Methods 1 and 2 produce same results

POPULATION TO HOUSEHOLDS

Method 1: Average Household Size

$$\text{Low income households} = \frac{\text{Low income population}}{\text{Average household size}}$$

Table #	Title	Data	Scale
C17002	Ratio of income to Poverty Level in the Past 12 Months	Low income population	Block group
S1701	Poverty Status in the Past 12 Months	“”	County, place
B25010	Average Household Size of Occupied Housing Units by Tenure	Average HH Size	Block group
S1101	Households and Families	“”	County, place

POPULATION TO HOUSEHOLDS

Using American FactFinder

- Advanced search
 - Topics (dataset)
 - Geography
- Clear selections before moving on

The screenshot shows the American FactFinder website interface. The browser address bar displays the URL: factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t&keepList=t. The page header includes the United States Census Bureau logo and the American FactFinder logo. The navigation menu contains: MAIN, COMMUNITY FACTS, GUIDED SEARCH, ADVANCED SEARCH (highlighted), and DOWNLOAD CENTER. The main content area is titled "Search - Use the options on the left (topics, geographies, ...) to narrow your search results".

Your Selections
'Your Selections' is empty
load search | save search

Search using the options below:

- Topics (age, income, year, dataset, ...)
- Geographies (states, counties, places, ...)
- Race and Ethnic Groups (race, ancestry, tribe)
- Industry Codes (NAICS industry, ...)
- EEO Occupation Codes (executives, analysts, ...)

To search for tables and other files in American FactFinder:

- 1 Enter search terms and an optional geography and click GO

topic or table name: c17002
state, county or place (optional): Baker County, Oregon
GO

C17002: RATIO OF INCOME IN THE PAST 12 MONTHS TO POVERTY LEVEL
-- or --
C17002: RATIO OF INCOME TO POVERTY LEVEL IN THE PAST 12 MONTHS

Select from **Topics, Race and Ethnic Groups, Industry Codes, EEO Occupation Codes.**

- these are added to 'Your Selections'
- the Search Results are updated

- 2 Next, select **Geographies** (states, counties, cities, towns, etc.)
 - these are added to 'Your Selections'
 - the Search Results are updated
- 3 Select one or more Search Results and click **View**

POPULATION TO HOUSEHOLDS

Method 1: Average Household Size

Table C17002

- Low income population
- Block group and up
- Ratios from 0.5 to 2.0
- Sum below 200% (OR...)
- Subtract high income

The screenshot shows the American FactFinder interface for Table C17002, titled "RATIO OF INCOME TO POVERTY LEVEL IN THE PAST 12 MONTHS". The table is for Baker County, Oregon, and shows data for the years 2009 to 2016. The table is annotated with three callouts:

- Total population:** Points to the "Total" row, which has an estimate of 15,504.
- Population below 200% poverty level (sum):** Points to the sum of the "Under .50", ".50 to .99", "1.00 to 1.24", "1.25 to 1.49", and "1.50 to 1.84" rows, which are 820, 1,519, 1,045, 886, and 1,500 respectively.
- Population above 200% poverty level:** Points to the "2.00 and over" row, which has an estimate of 9,152.

Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

POPULATION TO HOUSEHOLDS

Method 1: Average Household Size

Table S1701

- Low income population
- Place (city) and up
- Percent from 50% to 500%
- Read 200% below poverty level

AMERICAN FactFinder

Advanced Search - Search all data in American FactFinder

1 Advanced Search 2 Table Viewer

S1701 POVERTY STATUS IN THE PAST 12 MONTHS
2012-2016 American Community Survey 5-Year Estimates

Table View

Actions: Modify Table Add/Remove Geographies Bookmark/Save Print Download Create a Map

Tell us what you think. Provide feedback to help make American Community Survey data more useful for you.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and

Subject	Baker County, Oregon				
	Total Estimate	Margin of Error	Below poverty level Estimate	Margin of Error	Percent
Population for whom poverty status is determined	15,504	+/-158	2,339	+/-375	15.1
AGE					
Under 18 years	3,104	+/-40	661	+/-167	21.3
Under 5 years	809	+/-36	252	+/-90	31.1
5 to 17 years	2,295	+/-44	409	+/-115	17.8
Related children of householder under 18 years	3,082	+/-47	639	+/-168	20.7
18 to 64 years	8,457	+/-156	1,355	+/-235	16.0
18 to 34 years	2,558	+/-116	581	+/-136	22.7
35 to 64 years	5,899	+/-107	774	+/-155	13.1
65 years and over	5,288	+/-122	506	+/-96	9.6
Scroll to "ALL INDIVIDUALS WITH INCOME BELOW THE FOLLOWING POVERTY RATIOS"					
150 percent of poverty level	4,270	+/-418	(X)	(X)	(X)
200 percent of poverty level	6,352	+/-486	(X)	(X)	(X)
300 percent of poverty level	9,967	+/-541	(X)	(X)	(X)
400 percent of poverty level	11,485	+/-526	(X)	(X)	(X)
500 percent of poverty level	13,024	+/-413	(X)	(X)	(X)

Population below 200% poverty

POPULATION TO HOUSEHOLDS

Method 1: Average Household Size

Table B25010

- Average household size
- Block group and up

factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_16_5YR_B25010&prodType=table

MAIN COMMUNITY FACTS GUIDED SEARCH ADVANCED SEARCH DOWNLOAD CENTER

Advanced Search - Search all data in American FactFinder

1 Advanced Search 2 Table Viewer

Result 2 of 2 VIEW ALL AS PDF

B25010 AVERAGE HOUSEHOLD SIZE OF OCCUPIED HOUSING UNITS BY TENURE
Universe: Occupied housing units
2012-2016 American Community Survey 5-Year Estimates

Table View

Actions: Modify Table Add/Remove Geographies Bookmark/Save Print Download Create a M

View Geography Notes

Tell us what you think. Provide feedback to help make American Community Survey data more useful for you.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates and disseminates the official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties.

Versions of this

Baker County, Oregon		
	Estimate	Margin of Error
Total:	2.20	+/-0.06
Owner occupied	2.24	+/-0.07
Renter occupied	2.12	+/-0.12

2016

Average Household Size

POPULATION TO HOUSEHOLDS

Method 1: Average Household Size

Table S1101

- Average household size
- Place (City) and up

Advanced Search - Search all data in American FactFinder

1 Advanced Search 2 Table Viewer

S1101 HOUSEHOLDS AND FAMILIES
2012-2016 American Community Survey 5-Year Estimates

Table View

Actions: [Modify Table](#) | [Add/Remove Geographies](#) | [Bookmark/Save](#) | [Print](#) | [Download](#) | [Create a Map](#)

Tell us what you think. Provide feedback to help make American Community Survey data more useful for you.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates population estimates.

Versions of this table are available for the following years: 2012, 2013, 2014, 2015, 2016

Subject	Total		Married-couple family household		Male householder, non
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Total households	7,011	+/-197	3,567	+/-225	183
Average household size	2.20	+/-0.06	2.85	+/-0.09	2.84



POPULATION TO HOUSEHOLDS

Method 2: Low Income Population Ratio

$$\text{Low income households} = \text{Total Housholds} \times \frac{\text{Low income population}}{\text{Total population}}$$

Table #	Title	Data	Scale
B11016	Household Type by Household Size	Households	Block group
S1101	Households and Families	“”	County, place
C17002	Ratio of Income to Poverty Level in the Past 12 Months	Low income population	Block group
S1701	Poverty Status in the Past 12 Months	“”	County, place

POPULATION TO HOUSEHOLDS

Method 2: Low Income Population Ratio

Table B11016

- Total number of households
- Block group and up

Advanced Search - Search all data in American FactFinder

1 Advanced Search 2 Table Viewer

Result 2 of 2 VIEW ALL AS PDF

B11016 HOUSEHOLD TYPE BY HOUSEHOLD SIZE
Universe: Households
2012-2016 American Community Survey 5-Year Estimates

Table View

Actions: Modify Table Add/Remove Geographies Bookmark/Save Print Download Create a Map

View Geography Notes View Table Notes

Tell us what you think. Provide feedback to help make American Community Survey data more useful for you.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties.

Versions of this

	Baker County, Oregon	
	Estimate	Margin of Error
Total:	7,011	+/-197
Family households:	4,202	+/-229
2-person household	2,578	+/-212
3-person household	662	+/-150
4-person household	607	+/-117
5-person household	240	+/-82
6-person household	72	+/-43
7-or-more person household	123	+/-49
Nonfamily households:	2,729	+/-219
1-person household	2,371	+/-218
2-person household	293	+/-68
3-person household	43	+/-26
4-person household	20	+/-25
5-person household	2	+/-3
6-person household	0	+/-19
7-or-more person household	0	+/-19

https://www.census.gov/ Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

POPULATION TO HOUSEHOLDS

Method 2: Low Income Population Ratio

Table C17002

- Low income population
- Block group and up
- Ratios from 0.5 to 2.0
- Sum below 200% (or...)
- Subtract high income

The screenshot shows the American FactFinder interface for Table C17002, titled "RATIO OF INCOME TO POVERTY LEVEL IN THE PAST 12 MONTHS". The data is presented for Baker County, Oregon, with the universe being the population for whom poverty status is determined. The table shows estimates and margins of error for various income-to-poverty ratios.

	Estimate	Margin of Error
Total:	15,504	
Under .50	820	
.50 to .99	1,519	+/-822
1.00 to 1.24	1,045	
1.25 to 1.49	886	
1.50 to 1.84	1,500	+/-289
1.85 to 1.99	582	+/-194
2.00 and over	9,152	

Annotations on the table:

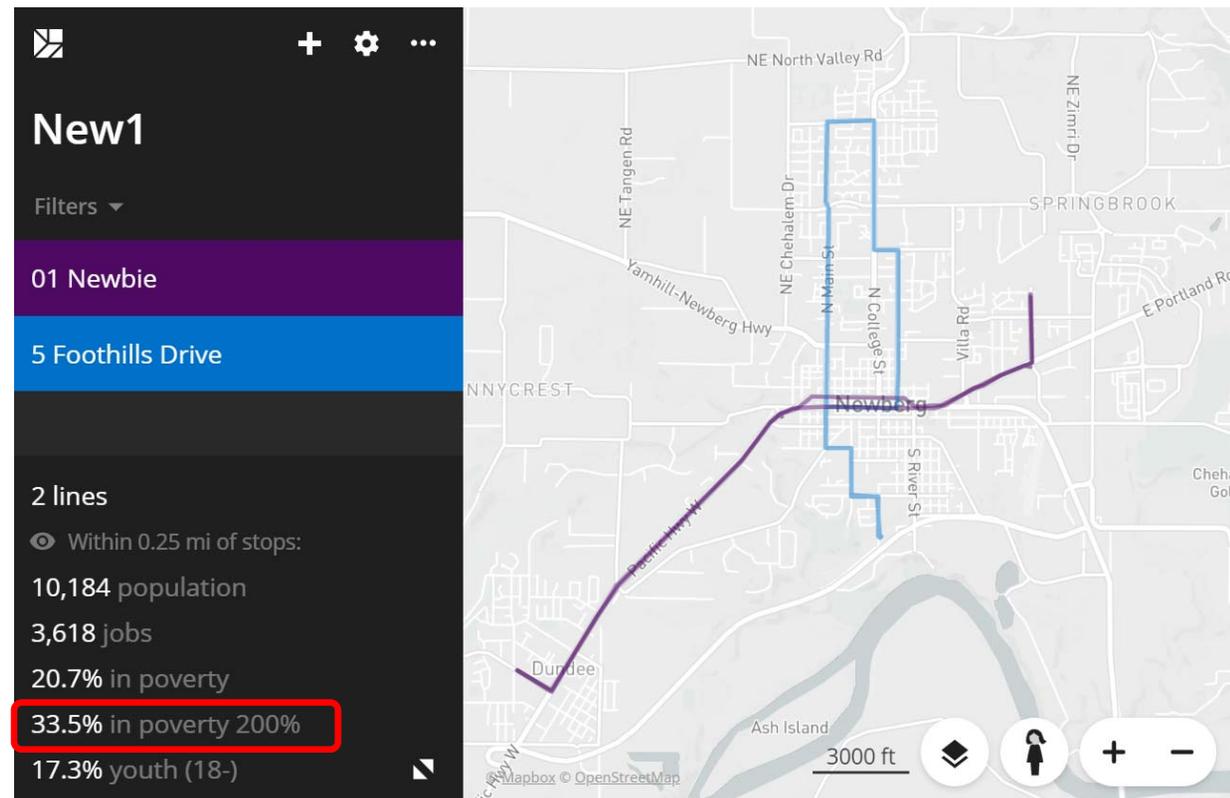
- A blue arrow points to the "Total" row, labeled "Total population".
- An orange arrow points to the sum of the rows from ".50 to .99" to "1.85 to 1.99", labeled "Population below 200% poverty level (sum)".
- A black arrow points to the "2.00 and over" row, labeled "Population above 200% poverty level".

Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

POPULATION TO HOUSEHOLDS

Remix Public Transportation: <https://platform.remix.com/>

- Uses Census ACS data
- Includes metrics:
 - % population in poverty
 - % population in poverty 200% federal level
 - Can convert using methods above
- Pending metrics:
 - Number of households in poverty 200% federal level
 - % households in poverty 200% federal level



REVIEW THE PURPOSE

STIF REQUIREMENTS

How Low-Income Household data is used

Advisory Committee Bylaws

- Definition of high percentage of Low-Income Households to **inform project selection**

Local Plan

- **Current and future conditions analysis** that includes locations of Low-Income Households to inform service planning

REQUIREMENTS

How Low-Income Household data is used

Formula Fund Allocations & Advisory Committee Project Selection Criteria

- **Increase in frequency of bus service** to communities with a high percentage of Low-Income Households
- **Expand bus routes and services** to service communities with a high percentage of Low-Income Households
- **Reduce fares** in communities with a high percentage of Low-Income Households

STIF REQUIREMENTS

How Low-Income Household data is used

Measureable Outcomes

- **Number of** low income households served
- Annual report on **actions taken to mitigate the tax impacts** of passengers in low-income communities

QUESTIONS?

THANK YOU!



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