Alaska Water and Wastewater Utility Affordability Model

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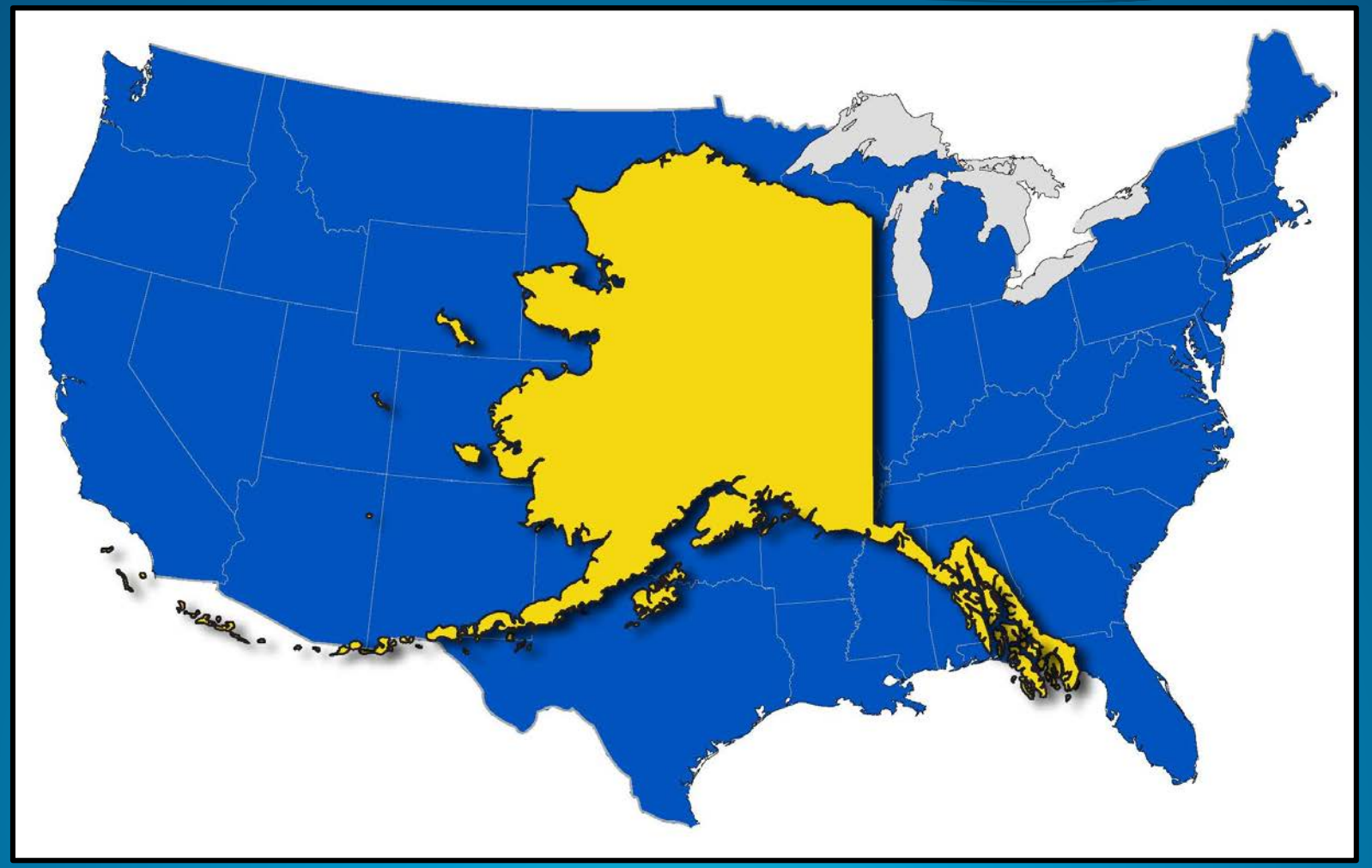
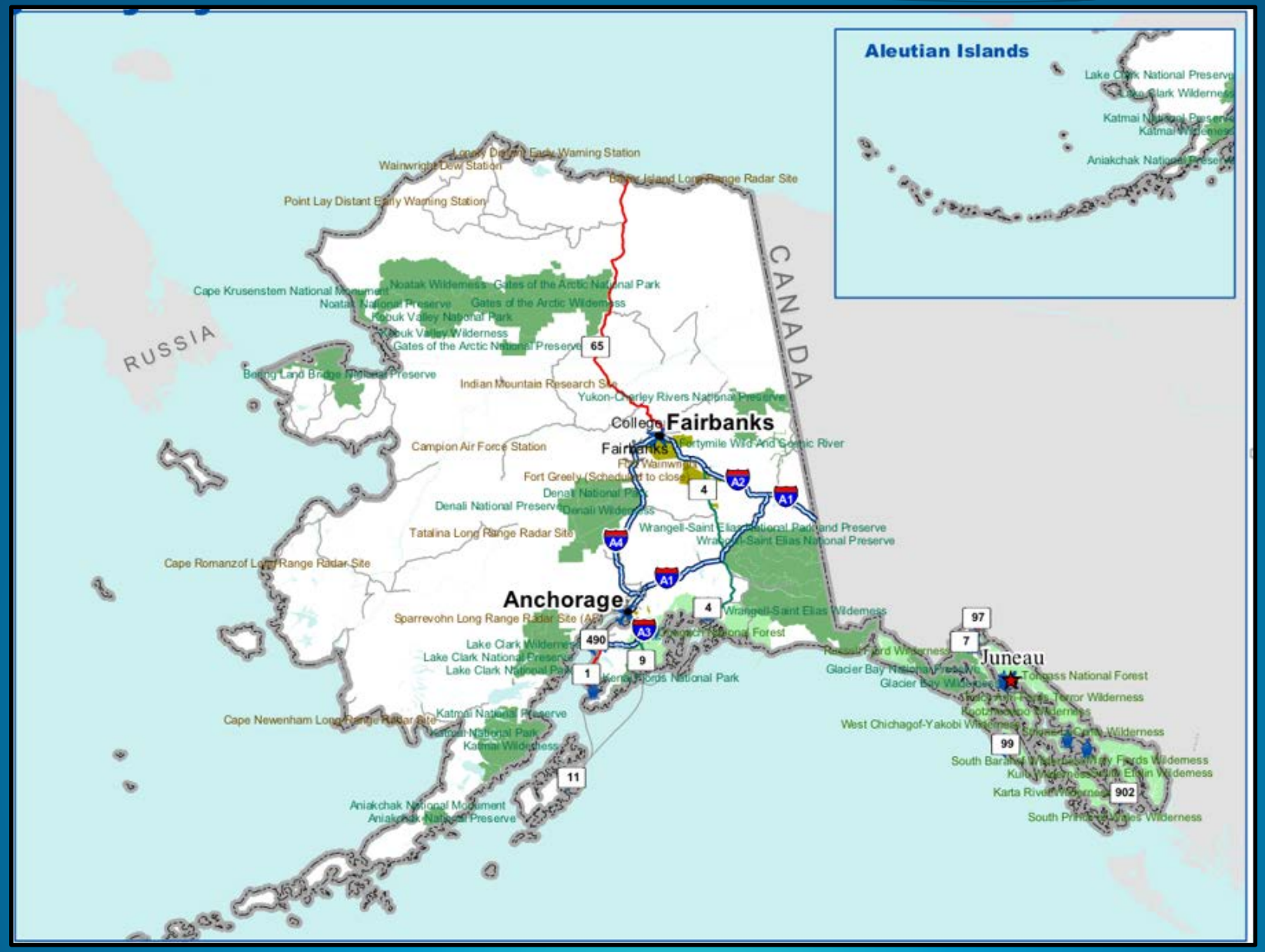
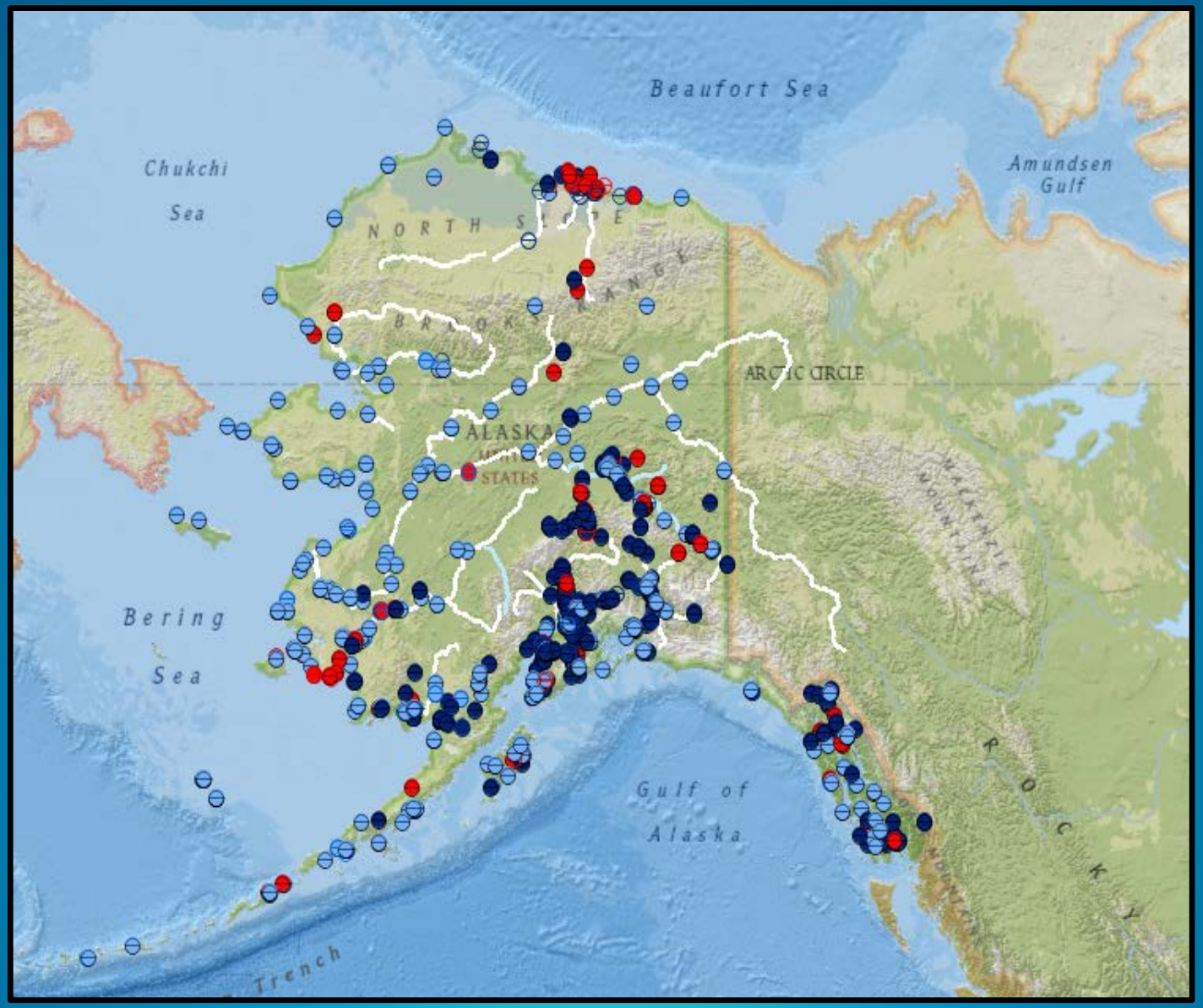
Department of Environmental Conservation
Division of Water
Facilities Programs
Capacity Development and Operator Certification
Remote Maintenance Worker
State Revolving Fund
Village Safe Water



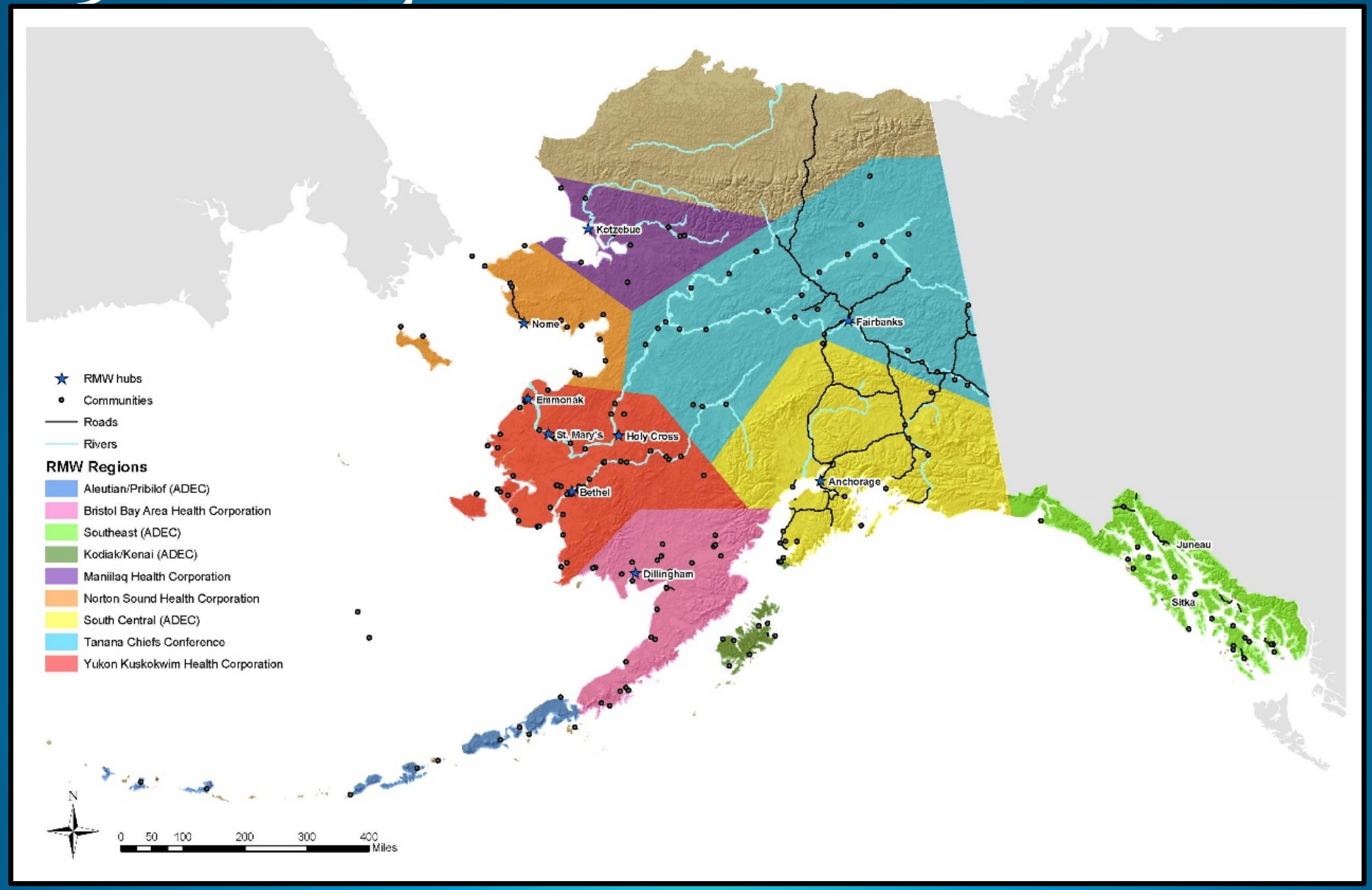
663,267 sq miles (1/5 the size for the Lower 48)
Population ~740,000
Anchorage ~300,000


Aleutian Islands
RUSSIA
CANADA
Wainwright DEW Station
Point Lay Distant Early Warning Station
Barter Island Long Range Radar Site
Cape Krusenstern National Monument
Noatak National Preserve
Noatak Wilderness
Gates of the Arctic National Park
Gates of the Arctic Wilderness
Kobuk Valley National Park
Kobuk Valley Wilderness
Gates of the Arctic National Preserve
Bering Land Bridge National Preserve
Indian Mountain Research Site
Yukon-Charley Rivers National Preserve
College
Fairbanks
Fairbanks
Campion Air Force Station
Fort Greely (Scheduled to close)
Denali National Park
Denali National Preserve
Denali Wilderness
Tatalina Long Range Radar Site
Wrangell-Saint Elias National Park and Preserve
Wrangell-Saint Elias National Preserve
Cape Romanzof Long Range Radar Site
Anchorage
Sparrevohn Long Range Radar Site (AFS)
Wrangell-Saint Elias Wilderness
Lake Clark Wilderness
Lake Clark National Preserve
Lake Clark National Park
Kenai Fjords National Park
Cape Newenham Long Range Radar Site
Katmai National Preserve
Katmai National Park
Katmai Wilderness
Aniakchak National Monument
Aniakchak National Preserve
Juneau
Glacier Bay National Preserve
Glacier Bay Wilderness
Tongass National Forest
West Chichagof-Yakobi Wilderness
South Baranof Wilderness
Kuiu Wilderness
Karta River Wilderness
South Prince of Wales Wilderness
65
4
A1
A2
A3
A4
490
9
1
11
97
7
99
902

1,403 Drinking Water Systems



156 water systems in rural communities



Alaska Village Sanitation

30 years ago, less than 25% of rural Alaska households had running water and flush toilets

By 1996, 55% of rural homes had piped or covered haul service

Today, approximately 86% of rural homes have indoor plumbing

32 communities still rely on honey buckets and hauled water

Average cost to provide piped water and sewer in rural AK is $500k per home

Alaska Village Sanitation

Do we continue to build new piped systems?

Can the communities support the user fees necessary for operations and maintenance?

What is an affordable user rate?

Rural Alaska Affordability Model

Need to more accurately determine the affordability of water and wastewater user fees in rural Alaska

- More accurate than the MHI indicator
- Inexpensive to use
- Easy to implement
- Results and method should be as transparent as possible

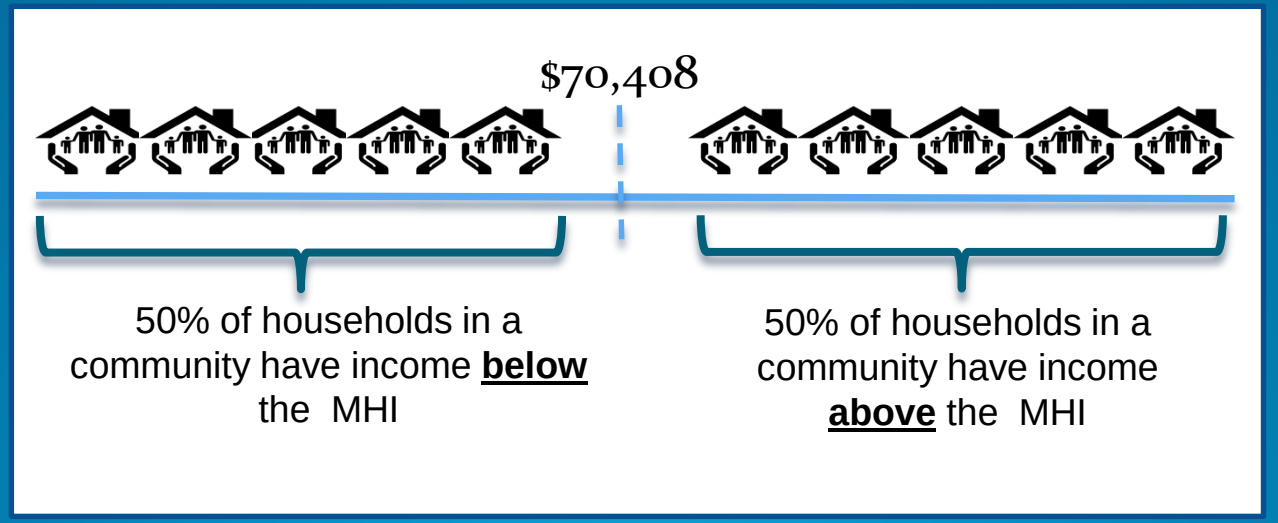
Start by defining affordability

- **Individual household level:** A **low income household** is able to pay a water bill without giving up other essential goods and services
- **Community level:** The community is able to cover the utilities annual costs

Rural Alaska Affordability Model

Historically, 5% of median household income (MHI) was the standard for affordable utility rates.

Median Household Income (MHI) in Fairbanks



According to MHI reference, water utility rates of $293 per month or less are affordable in Fairbanks.

Rural Alaska Affordability Model

BUT…

- MHI is an inaccurate measure due to problems with data collection
- MHI fails to reflect the cost burden experienced by below median income households
- MHI does not account for income distribution in a community
- MHI does not account for high costs of living
- MHI does not account for unique economic and demographic situation of rural Alaska

Rural Alaska Affordability Model

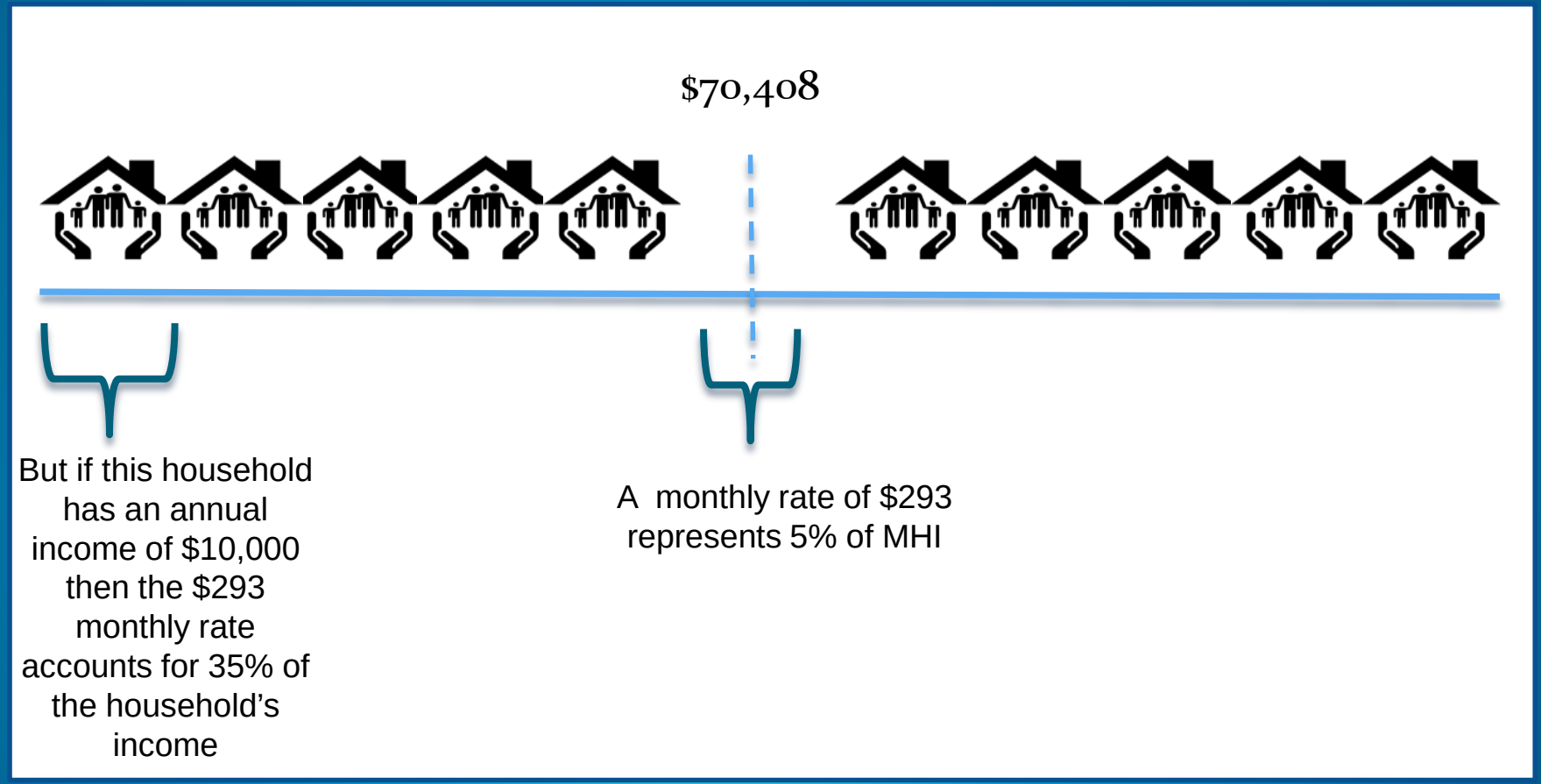
MHI is an inaccurate measure due to problems with data collection

MHI is a static snapshot of income

- Rural Alaskan MHI values are collected every 5 years
- Evidence suggests that income in this region can vary significantly from year to year which can lead to over or under estimation of MHI

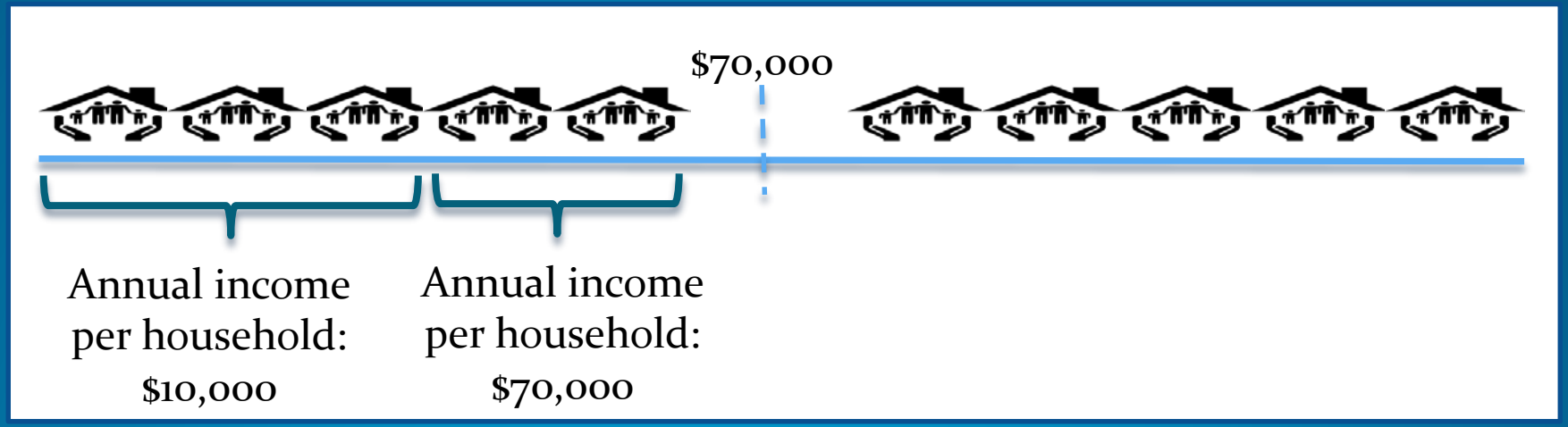
Rural Alaska Affordability Model

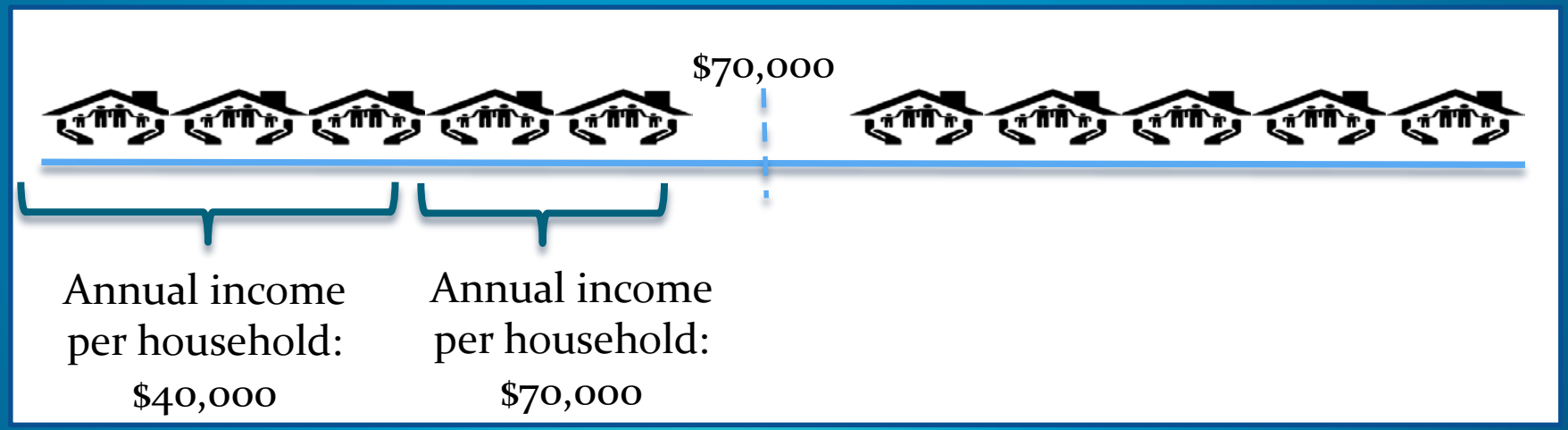
MHI fails to reflect the cost burden experienced by below median income households



Rural Alaska Affordability Model

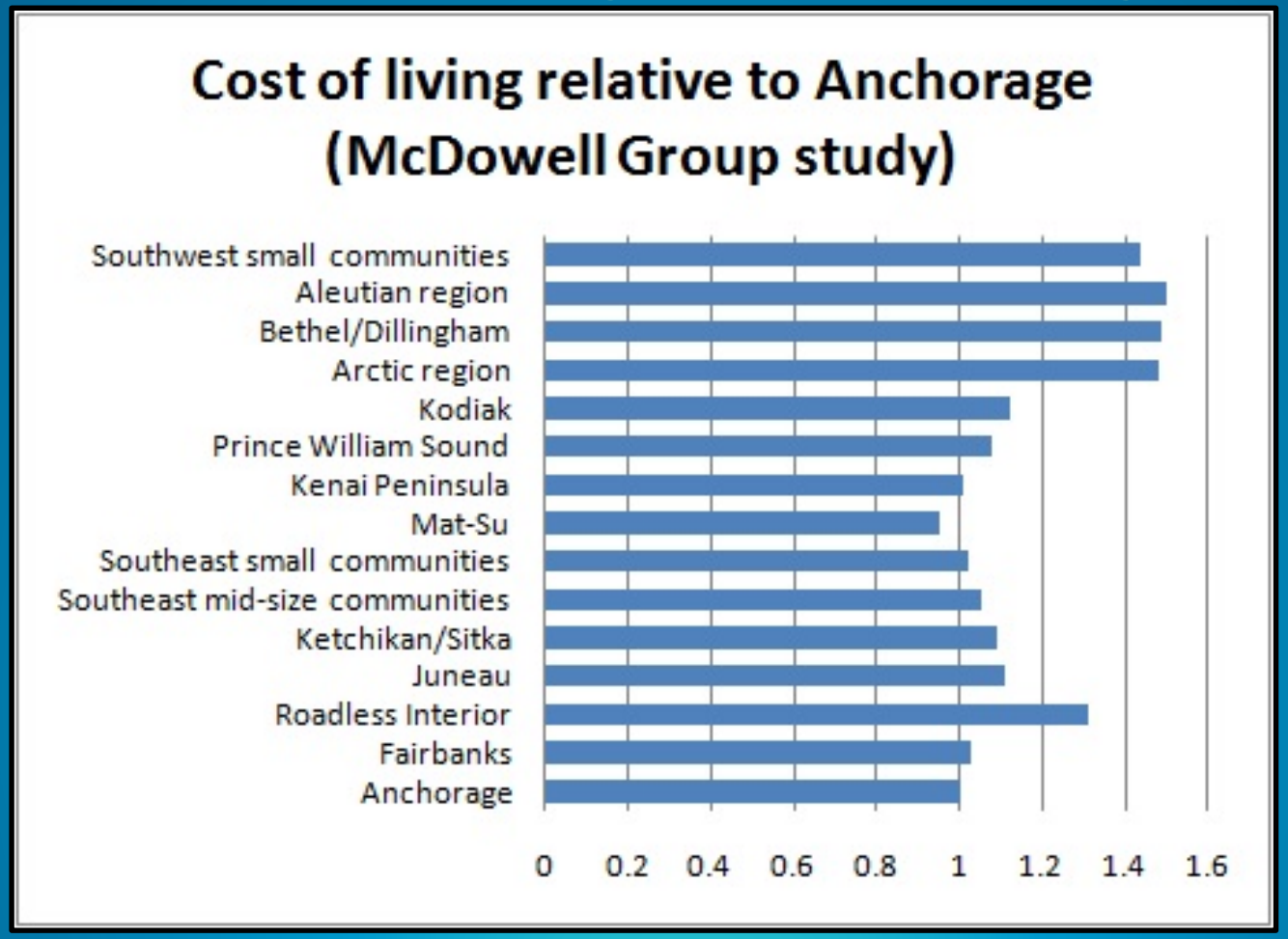
MHI does not account for income distribution in a community





Rural Alaska Affordability Model

- MHI does not account for high costs of living in rural Alaska



Rural Alaska Affordability Model

MHI does not account for unique economic and demographic situations of rural Alaska

Average household size: 4.40

Age dependency ratio*:

87.3%

Average household size: 3.18

Age dependency ratio*:

65.8%

*Age dependency ratio: number of people under the age of 18 + people over the age of 65 / number of people between the ages of 18 - 65

Rural Alaska Affordability Model

The new indicator

- Accounts for income distribution by examining the impact of user fees on different income quintiles
- Uses socio-economic indicators to capture factors that impact households' ability to pay and disposable income
- Utilizes US Census data as it is the most readily available

Rural Alaska Affordability Model

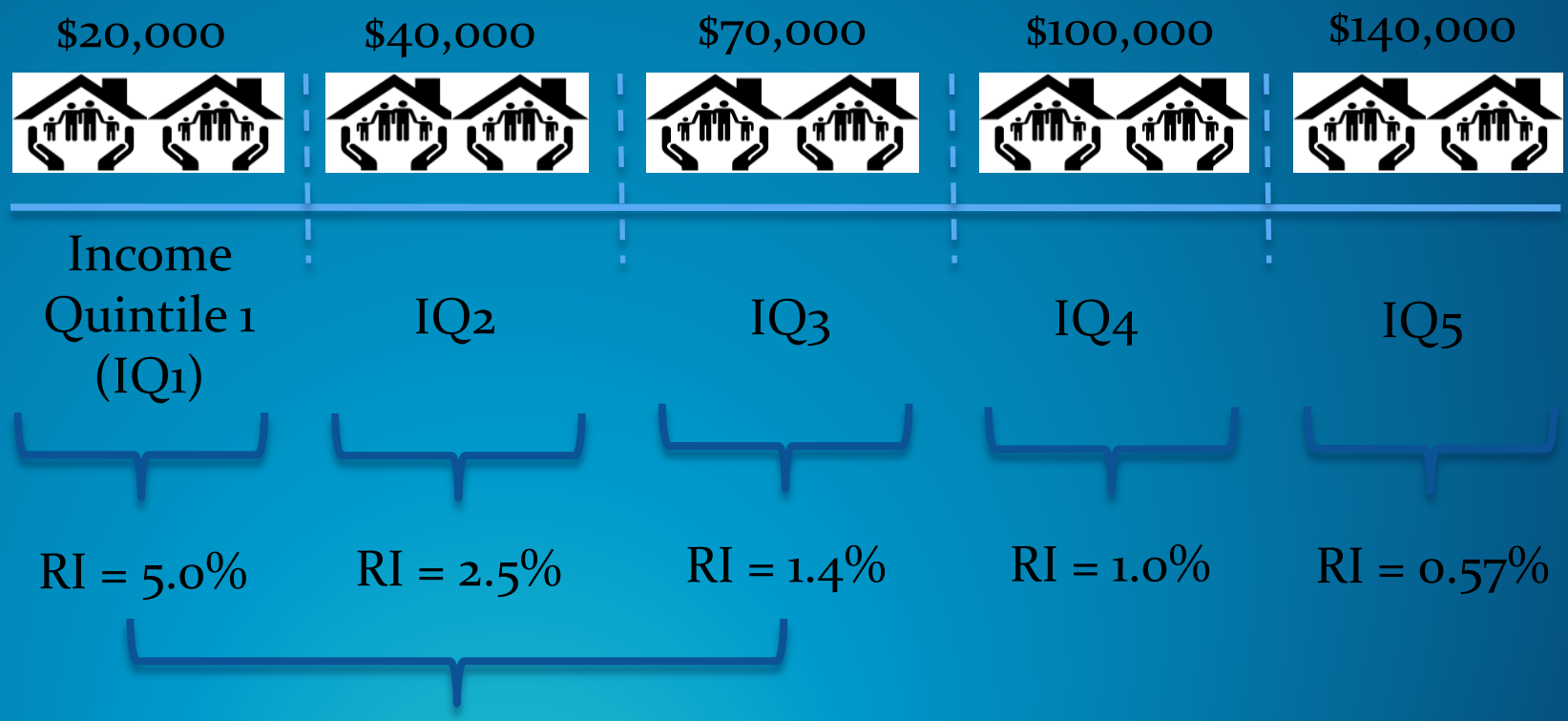
Residential Index (RI) calculated for every income quintile, in particular for those below the median values

RI is obtained by dividing the annual user fee by each income quintile and averaging the score for IQ1 – IQ3

Low Impact is an RI of less than 2%

Medium Impact is an RI between 2% and 5%

High Impact is an RI of over 5%



Annual User Fee: $1,000

Rural Alaska Affordability Model

A Financial Capability Indicator (FCI) that is calculated by assigning values from 1 (weak) to 3 (strong) to the following:

- Percentage of people over the age of 16 with full time jobs
- Percentage of households living under the poverty level
- Percentage of households which are Supplemental Nutrition Assistance Program (SNAP) recipients
- Percentage of households which receive public assistance
- Percentage of MHI spent on an average electric bill
- Cross-price elasticity of demand of water with respect to electricity prices

The average value of each category provides the FCI for the community.

Rural Alaska Affordability Model

% cost to quintile	≤ 2%	2% < x ≤ 5%	> 5%
Affordability value	High Burden	Medium Burden	Low Burden
% over the age of 16 employed full time	≤ 30%	30% < x ≤ 50%	> 50%
Affordability value	1	2	3
% households under the poverty level	> 20%	10% < x ≤ 20%	< 10%
Affordability value	1	2	3
% of households which are SNAP recipients	>20%	10% < x ≤ 20%	<11%
Affordability value	1	2	3
% of households receiving public assistance	>30%	10% < x ≤ 20%	<11%
Affordability value	1	2	3
Electric bill % of MHI	> 5%	2% < x ≤ 5%	<2%
Affordability value	1	2	3
Cross Price Elasticity of Water	<-0.66	-0.66% < x ≤ -0.33	> -0.33
Affordability value	1	2	3

Rural Alaska Affordability Model

Financial Capability Indicator (FCI)	Residential Index (RI)		
	Low ≤ 2%	Mid-Range 2 % < RI ≤ 5%	High > 5%
Strong > 2.5	Low Burden	Low Burden	Medium Burden
Mid-Range 1.5 < x ≤ 2.5	Low Burden	Medium Burden	High Burden
Weak ≤ 1.5	Medium Burden	High Burden	High Burden

Affordability

Affordability

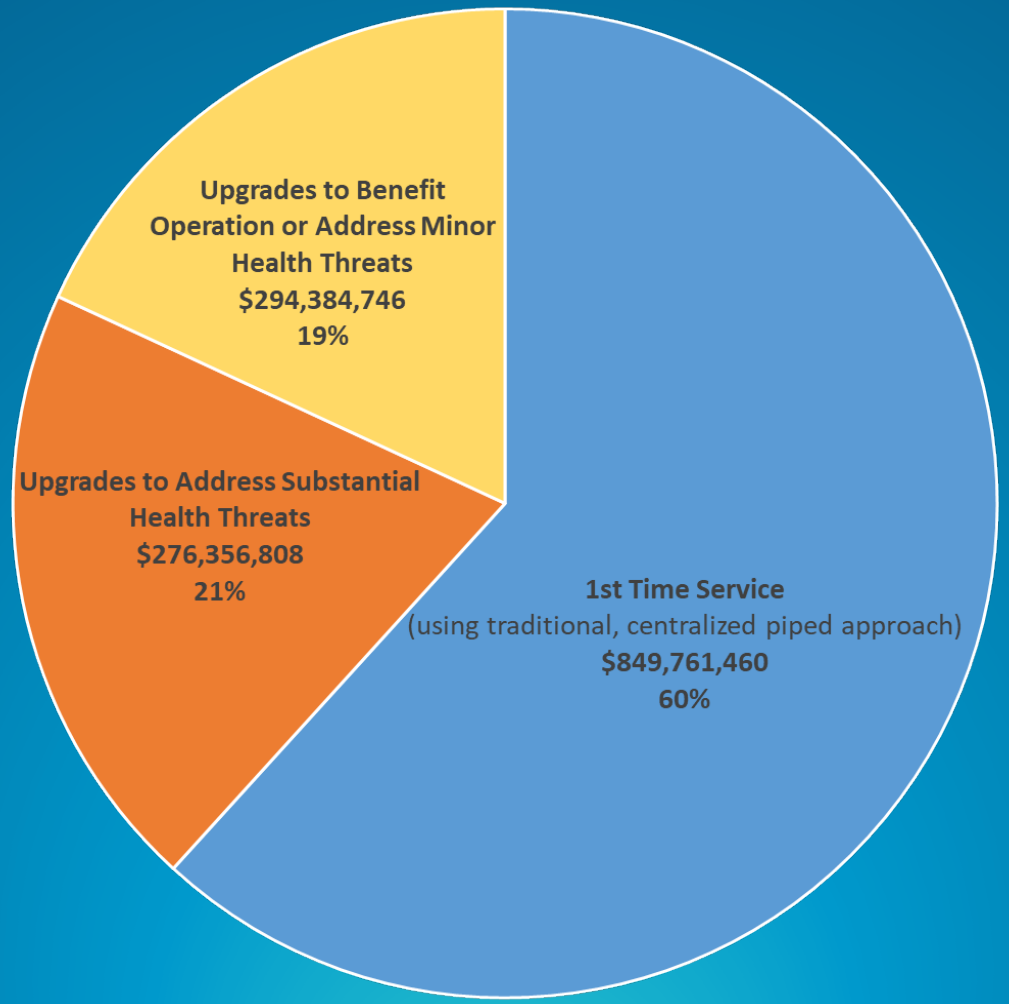
Rural Alaska Affordability Model

Alaska Village Water and Sewer Household Rates & Affordability

COMMUNITY	COMBINED WATER & SEWER RATE	WATER ONLY RATE	SEWER ONLY RATE	INDICATOR SCORE
Adak	$65.00			Low Burden
Akiachak	$118.00			High Burden
Akiak	$105.00			Medium Burden
Akutan	$10.00	-	-	Low Burden
Alakanuk	$75.00			High Burden
Ambler	$71.40	$42.84	$42.84	High Burden
Bethel*	$272.73			High Burden
Brevig Miss	$100.00			Medium Burden
Buckland	$59.50			Medium Burden

SRF Micro Loan Program

SRF Micro Loan Program



Rural Alaska Funding Need
$1,420,503,024

Annual grant funds for rural sanitation infrastructure ~$80 million

Updated March 11, 2019

SRF Micro Loan Program

Eligibility Criteria

- Communities Serving less than 1,000
- Demonstrate a minimum level of capacity
  - 50 points on Operations & Maintenance Best Practices scoring criteria

	Category	Best Practice	Points	
Technical	*Operator Certification*	Utility has more than one operator certified to the level of the water system	10	
		Primary operator is certified to the level of the water system and the backup operator holds some level of certification in water treatment or distribution	7	
		Primary operator is certified to the level of the water system and the backup operator holds no certification or there is no backup operator	5	
		Utility has one or more operators certified at some level in water treatment or distribution	3	
		Utility has no certified operators	0	
	Preventive Maintenance Plan	Utility has a written PM plan; PM is performed on schedule; records of completion are submitted on a quarterly basis and have been verified	25	
		Utility has a written PM plan; performance of PM and record keeping are not consistent	15	
		Utility has no PM plan or performs no PM	0	
	Compliance	Utility had no Monitoring and Reporting violations during the past year	10	
		Utility had up to five Monitoring and Reporting violation during the past year	5	
		Utility had more than five Monitoring and Reporting violation during the last year	0	
		Total Technical Points	**45**	
Managerial	*Utility Management Training*	A person who holds a position of responsibility for management of the utility has completed a DCRA approved Utility Management course or other utility management training course within the last five years	5	
	Meetings of the Governing Body	The utility owner's governing body meets routinely consistent with the local ordinance/bylaw requirements and receives a current report from the operator	5	
		The utility owner's governing body meets routinely consistent with the local ordinance/bylaw requirements	2	
		The utility owner's governing body does not meet	0	
		Total Managerial Points	**10**	
Financial	*Budget*	Utility owner and the Utility have each adopted a realistic budget and budget amendments are adopted as needed; Accurate monthly budget reports are prepared and submitted to the governing body	15	
		Either the Utility or the Utility owner has adopted and implemented a budget, the other has not	13	
		Either the Utility or the Utility owner has adopted a budget, but it is not being implemented	10	
		Utility owner and the Utility have not adopted a budget	0	
	Revenue	Utility is collecting revenue sufficient to cover the Utility's operating expenses and to contribute to a repair and replacement account	20	
		Utility is collecting revenue sufficient to cover expenses	15	
		Utility has a fee schedule and a collection policy that is followed	5	
		Utility has no fee structure or collection policy	0	
	Worker's Compensation Insurance	Utility has had a workers' compensation policy for all employees for the past two years and has a current policy in place	5	
		Utility has a current workers' compensation policy in place for all employees	2	
		Utility has no workers' compensation policy	0	
	Payroll Liability Compliance	Utility has no past due tax liabilities and is current with all tax obligations	5	
		Utility owes back taxes, but has a signed payment agreement, is current on that agreement, and is up-to-date with all other tax obligations	2	
		Utility is not current with its tax obligations and/or does not have a signed repayment agreement for back taxes owed	0	
		Total Financial Points	**45**	
		Total Points Possible	**100**	

SRF Micro Loan Program

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SRF Micro Loan Program

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		Total Managerial Points	**10**	

SRF Micro Loan Program

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SRF Micro Loan Program

Subsidy level of Micro Loan is determined by the Capacity Score and Affordability of current user rates

Micro Loan Subsidy Matrix

Affordability	Best Practices Score: Mid (50-75)	Best Practices Score: High (75-100)
High Burden	70%	90%
Medium Burden	50%	70%

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Department of
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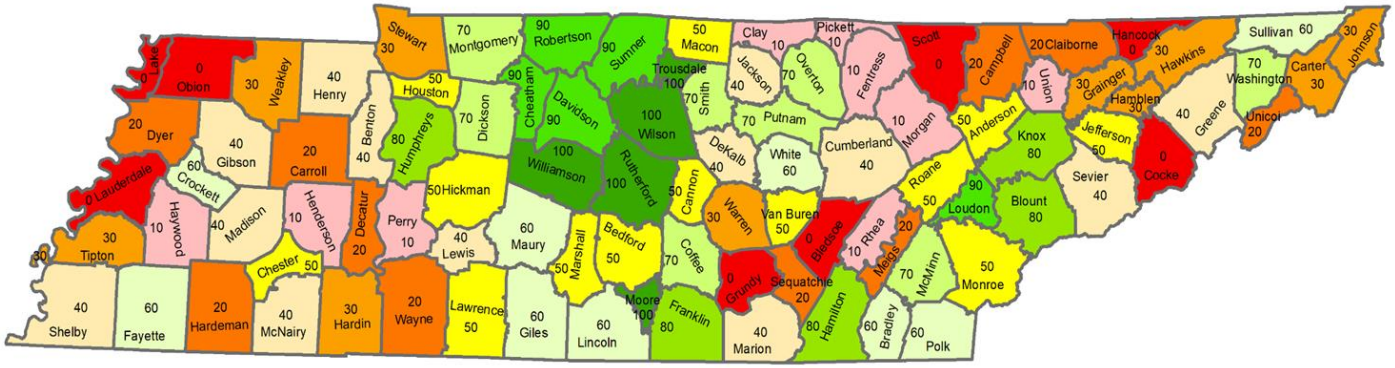
Conservation

Addressing Affordability Issues – TN SRF

Director: Leslie Gillespie-Marthaler, Ph.D.

Outline

- 2019 TN Ability to Pay Index (ATPI)
- State Coordination
- Data & Uses
- SRF Subsidy & Pilot Projects
- Technical Assistance & Training
- Questions



TN State & Federal Coordination

- Multi-agency coordination:
  - ✓ Tennessee Department of Environment & Conservation (TDEC)
  - ✓ Tennessee Department of Economic and Community Development (ECD)
  - ✓ Tennessee Office of the Comptroller
  - ✓ TN USDA-Rural Development
  - ✓ University of Tennessee Institute of Agriculture (5-year Contract)
- Collectively developed requirements to assess community ability to afford: SRF loans, grant match (CDBG), other
- Starting in FY 2019, updated annually for 95 counties and 347 cities and municipalities in TN
- Provides better ability to assess trends in TN communities over time

Data

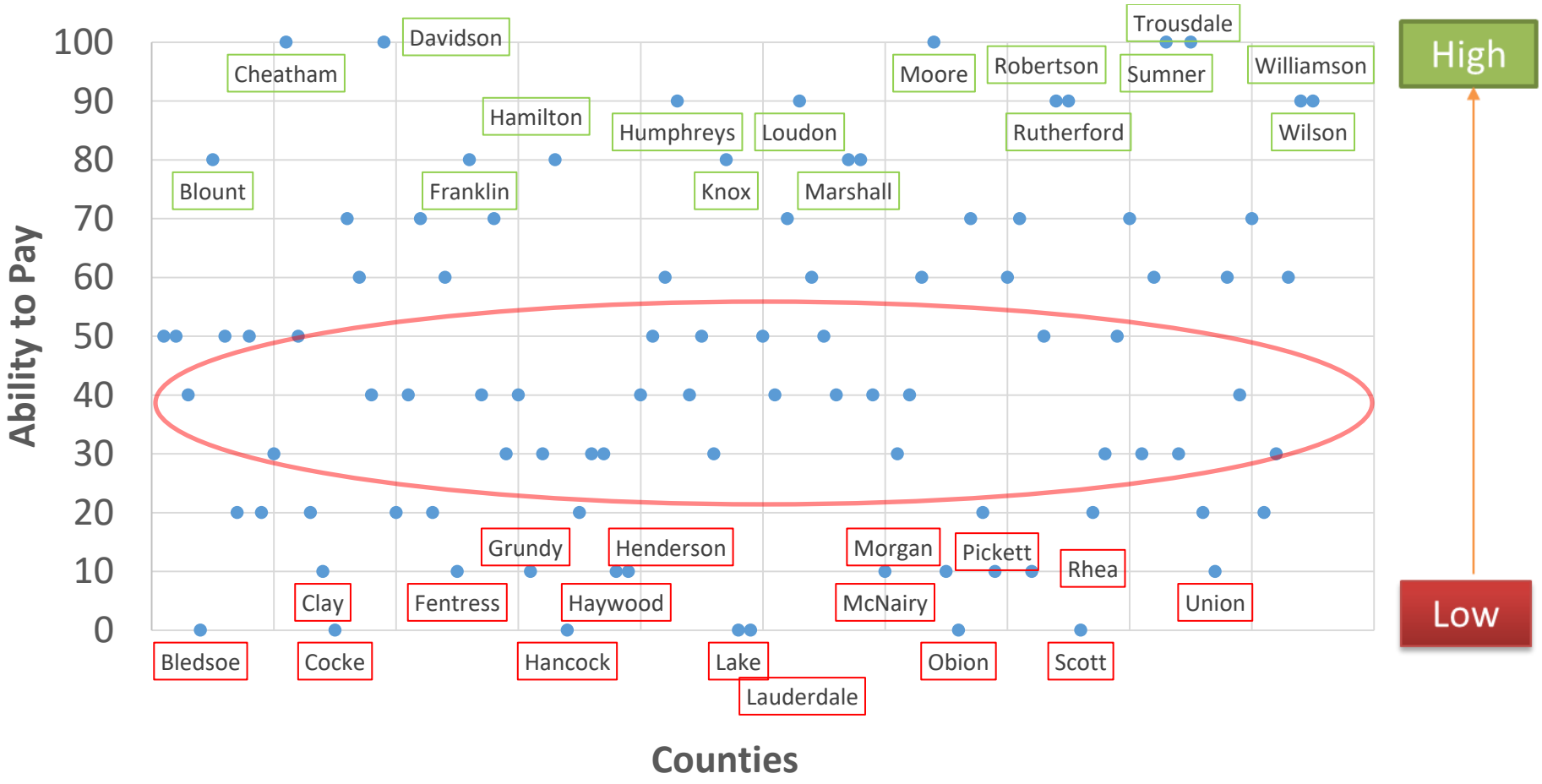
- The 2019 TN ATPI includes multi-year trends on the following:
  - ✓ Population change
  - ✓ Median household income
  - ✓ Poverty rate & food stamp dependence
  - ✓ Unemployment
  - ✓ Bond rating
  - ✓ Debt

WRRDA (2014) minimum criteria for assessing community ability to pay:

- Population trend
- Income
- Unemployment
- "Any other metrics"

- Broader database also includes additional variables – clearing house for collection and possible future use in the indices:
  - ✓ Age, household makeup, inflation, property taxes, land values , 20-year bond-buyer index, full market property value, tax rates, compliance , water loss, water user rates, etc.

2019 ATPI TN Counties



Tools & Dashboards

Interactive database and ATPI (in second year):

- ✓ Clickable map of TN with counties and cities and estimate of SRF interest rates
- ✓ Drinking water and Wastewater rates dashboard

Select County →	Drop Down	Tennessee
Change in Population (2010-2017)	5.9%	5.8%
Poverty Level (2017)	14.9%	15.0%
Unemployment Rate (2019)	3.1%	3.7%
Food Stamps (2017)	18.9%	15.7%
Median Age (2017)	38.6	38.6
Change in Median Age in years (2010-2017)	1.3	1.0
Adjusted Median Household Income 2017 (MHI)	$37,168	$53,702
Change in Median Household Income (2010-2017)	-4.2%	10.4%

Relative Trend	-2 STDEV	-1 STDEV	Tennessee	+1 STDEV	+2STDEV
Above average growth					
Lower than state average					
Lower than state average					
Above average reliance					
Older than state average					
Above state's average shift in age					
Very low MHI					
Significantly below average change					

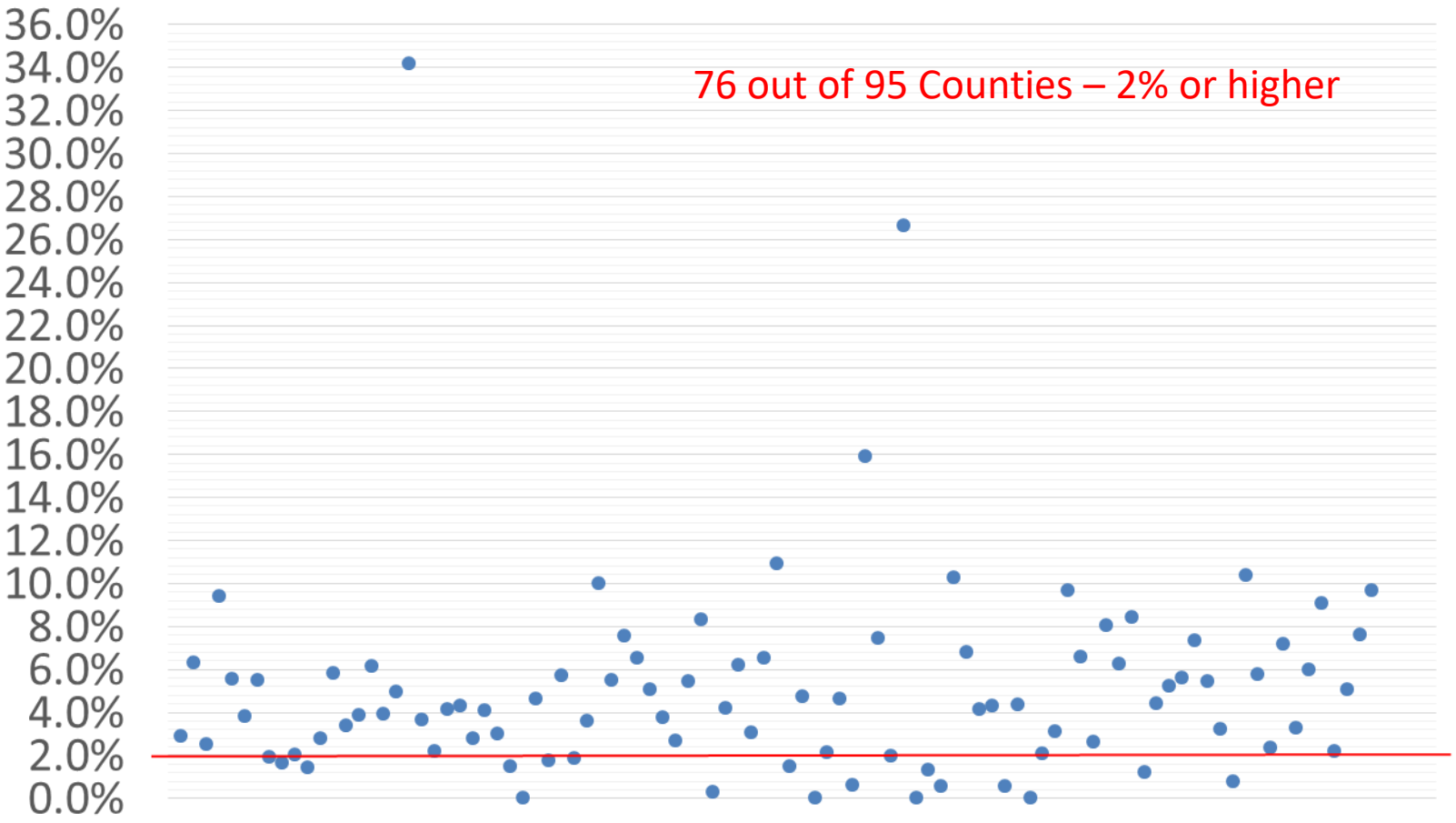
Macon	2010	2017
Population	21,934	23,239
Median Age (years)	37.3	38.6
Median Household Income	$38,811	$37,168

Abilty to Pay Index
50

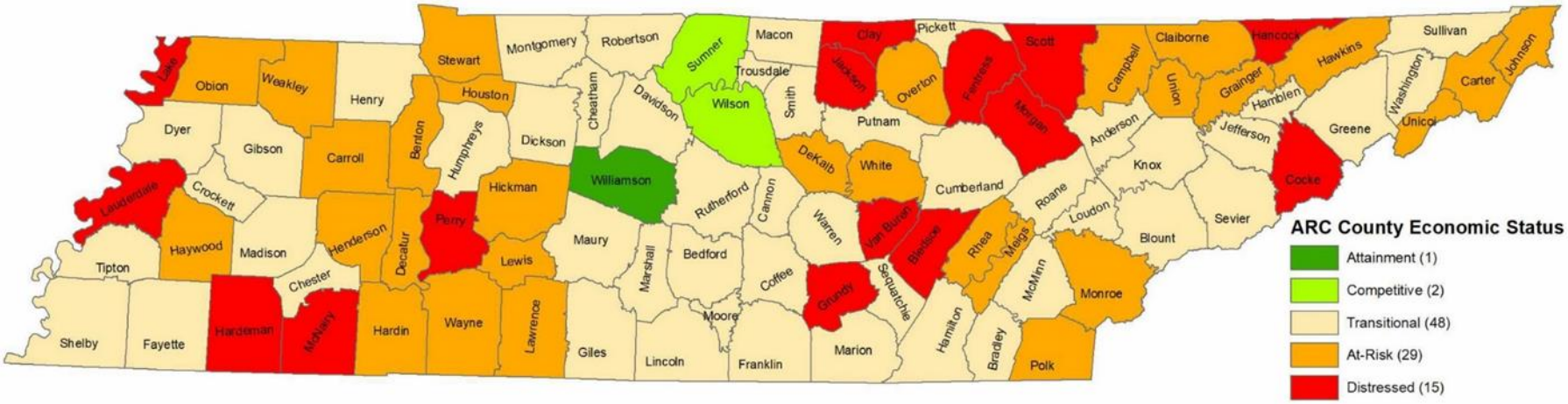
UTEXTENSION INSTITUTE OF AGRICULTURE THE UNIVERSITY OF TENNESSEE

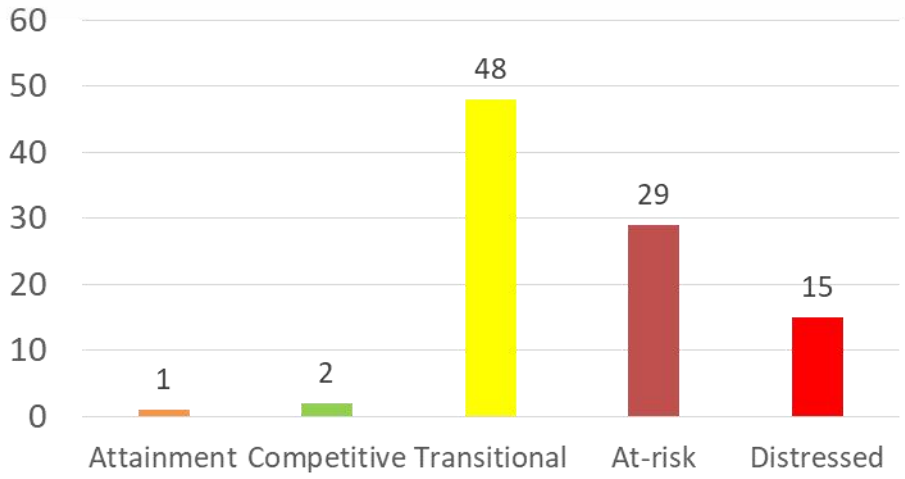
TN Department of Environment & Conservation

Debt Per Household as a % of MHI



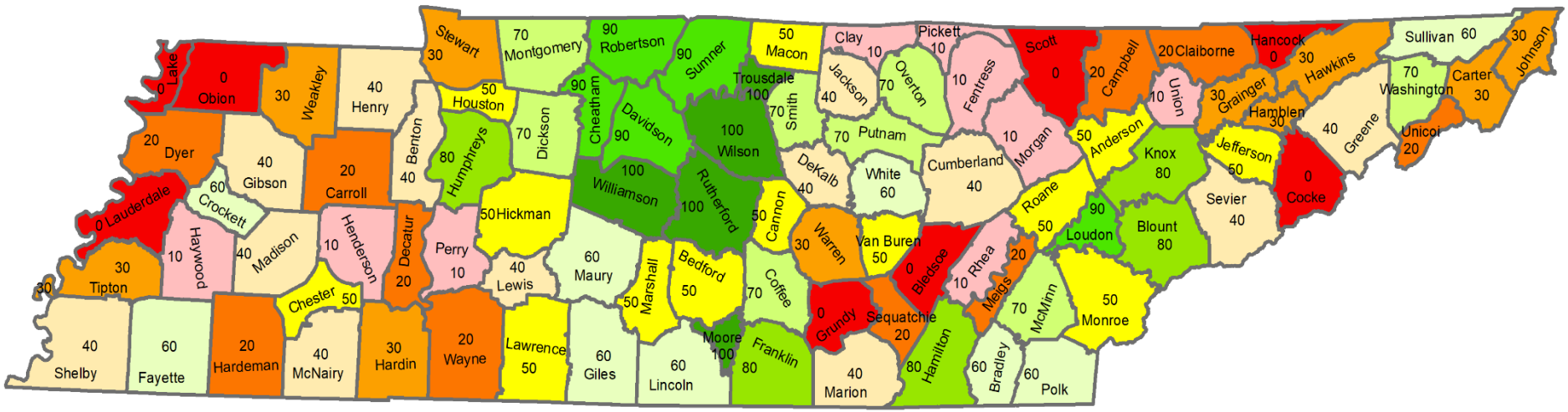
2019 ARC TN County Status

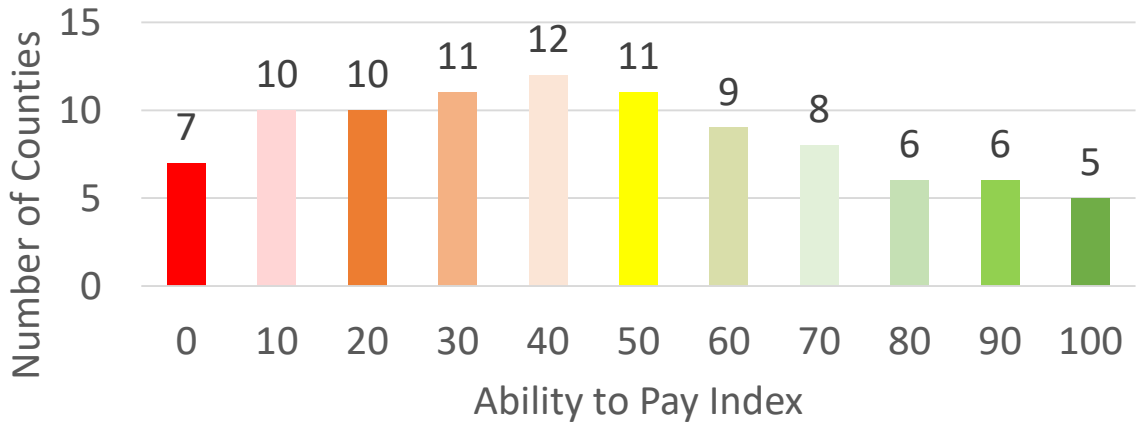




- Unemployment
- Income
- Population

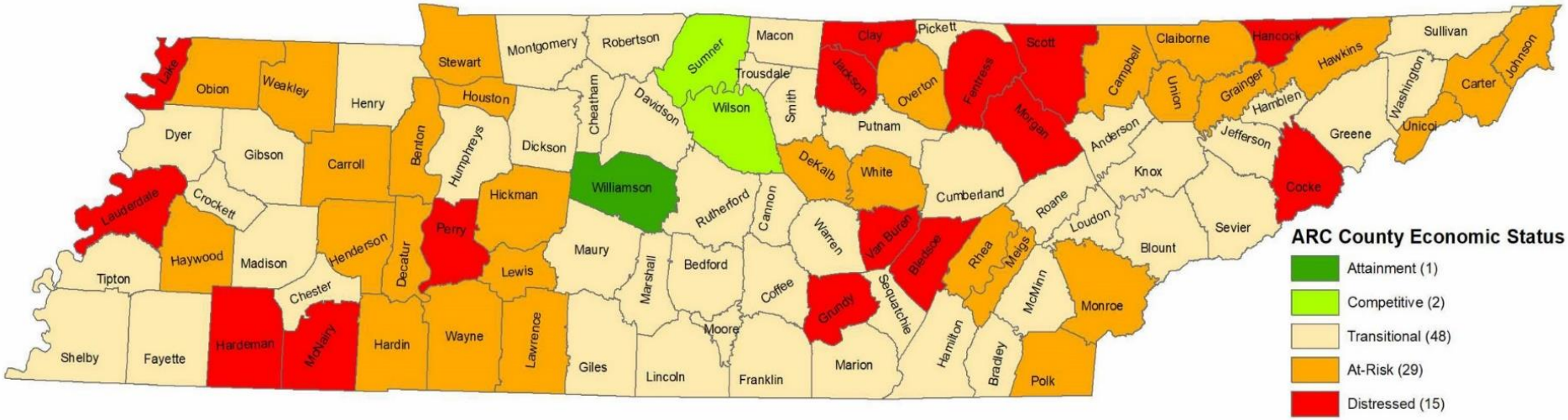
2019 ATPI TN Counties

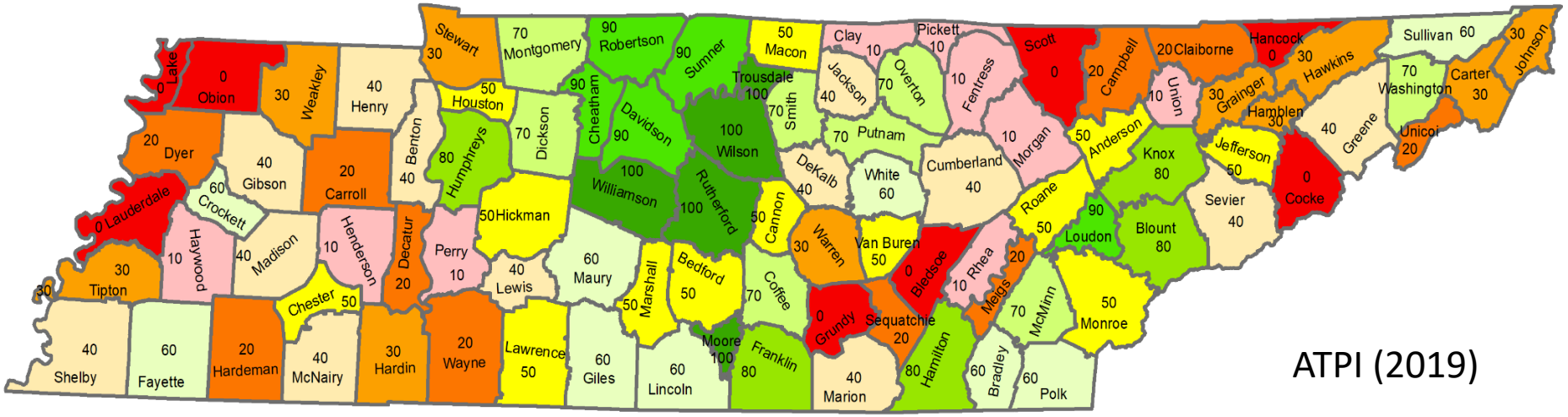




- Unemployment
- Income
- Population
- Debt
- Bond rating
- Poverty

Comparison





ATPI (2019)

SRF Subsidy

Subsidy = principal forgiveness and/or lower interest rate*

Starting FY 2019, SRF subsidy is prioritized to small and disadvantaged communities:

- ✓ Small (population served < 10,000)
- ✓ Disadvantaged (ATPI <= 60%)
- ✓ Pilot Projects

What are Pilot Projects?

- Small and disadvantaged communities that agree (contractually) to *in-kind efforts to address high priority issues and share results with public*
- Eligible for larger amounts of principal forgiveness
- Only a few each fiscal year

* Lower interest rates may also be applied to Sustainable, Resilient, and Green Projects

Approved Pilot Projects

- Town of Oliver Springs (Water Loss)
  - ✓ Guidance development
  - ✓ Field training
  - ✓ Economic analysis
  - ✓ Partner with ECD (CDBG)
  - ✓ Template for small communities

- City of Dyersburg (Flood Resilience)
  - ✓ Planning & design
  - ✓ I&I remediation
  - ✓ Best practices/benchmarks
  - ✓ West TN workshop

Technical Assistance & Training

Current and new opportunities:

- Fleming Training Center (current)
- TAUD Technical Assistance (State FY 20)
- Water Loss Training (State FY 20)
- TNPOP/Urban Waters (State FY 20 & 21)

Technical Assistance Contract for Small and Disadvantaged Systems:

- ✓ Asset management
- ✓ Rates and revenues
- ✓ Fiscal management
- ✓ Capacity development
- ✓ Basic skills
- ✓ Trouble shooting water loss
- ✓ Trouble shooting DBPs
- ✓ Nutrient / energy optimization
- ✓ other

ATPI Data Sources and References

- Population data: American Community Survey 5-year estimates population B01003 (2009 to 2017)
- Median Age: American Community Survey 5-year estimates Median Age B01002 (2009 to 2017)
- Household data: American Community Survey 5-year estimates Housing Units B25001 (2009 to 2017)
- Families in poverty: United States Department of Agriculture – Economic Research Service SNAP Benefits (2013 to 2017)
- Median household income: American Community Survey median household income in the past 12 months B19013 (2009 to 2017)
- Inflation data: Consumer Price Index Detailed Report Tables from Bureau of Labor Statistics and Federal Reserve Bank, St. Louis
- County Financial/Bond rating: Electronic Municipal Market Access Municipal Security Regulatory Board website (latest available) - https://emma.msrb.org/IssuerHomePage/State?state=TN
- Unemployment rate – Tennessee Department of Labor and Workforce Development (latest available) – https://www.tn.gov/workforce/general-resources/major-publications0/major-publications-redirect/public-reports-redirect/labor-market-reports.html
- Property tax revenue – Tennessee Department of Revenue (2013 to 2017)
- County debt data (2014 to 2018 data) – Tennessee Comptroller of the Treasury - https://apps.cot.tn.gov/TAG/

More Information

Ask.SRF@tn.gov

https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/state-revolving-fund-program.html

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Disadvantaged Community Criteria

Colorado methodology

Disadvantaged Community Status (DAC)

- History and Criteria Changes
- Primary and Secondary Factors
- Examples and Business Case
- Continual Improvement

- DON’T DO THIS!

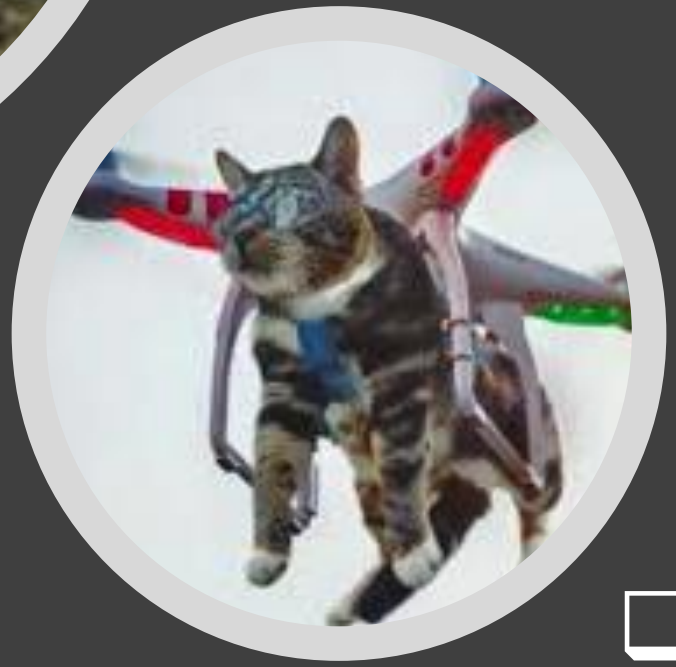
History and Criteria Changes

- Summary of Goals

  - ✓Meet WRRDA requirements
  - ✓Transparent
  - ✓Simple but complete
  - ✓Maintain sufficient set of communities
  - ✓Better identify DAC's
  - ✓Reduce income surveys

History and Criteria Changes

Previous Criteria	
Population less than 10,000	24 month county unemployment greater than 2%
MHI less than 80% State MHI	Annual County population change less than 5%



DON’T DO THIS!

Ask communities:

- ❑ Are you poor?
- ❑ Can you afford this loan?
- ❑ Check box if you are impoverished.

Don’t do this!

Or this!

Primary and Secondary Factors

Three Tests

Primary Factors

Current Criteria

P1 Median Household Income (MHI)	P2 Median House Value (MHV)	P3 Unemployment Or Job Loss
≤ 80% of State MHI	≤ 100% State MHV	≥ State Average + 1% Or < 0%

Secondary Factors

Current Criteria

S1 County MHI	S2 System Population	S3 Assessed Value	S4 Debt per tap to MHV	S5 System Cost per tap to MHI Or Project Rates per tap to MHI
≤ 80% of State MHI	Population loss	< State median municipality	Debt/tap/MHV > median municipal system	> median municipal System

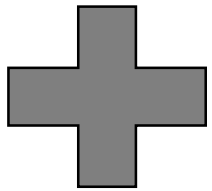
DON’T DO THIS!

- Income survey
- All completed in the same handwriting

Test One (qualifies)

P1

MHI =
≤ 80% of
State MHI



P2

MHV =
≤ State MHV

or

P3

Unemployment =
≥ State Average +
1%

P3

Job Loss =
< 0%

Test Two (qualifies)

P1

MHI =
≤ 80% of State
MHI

+

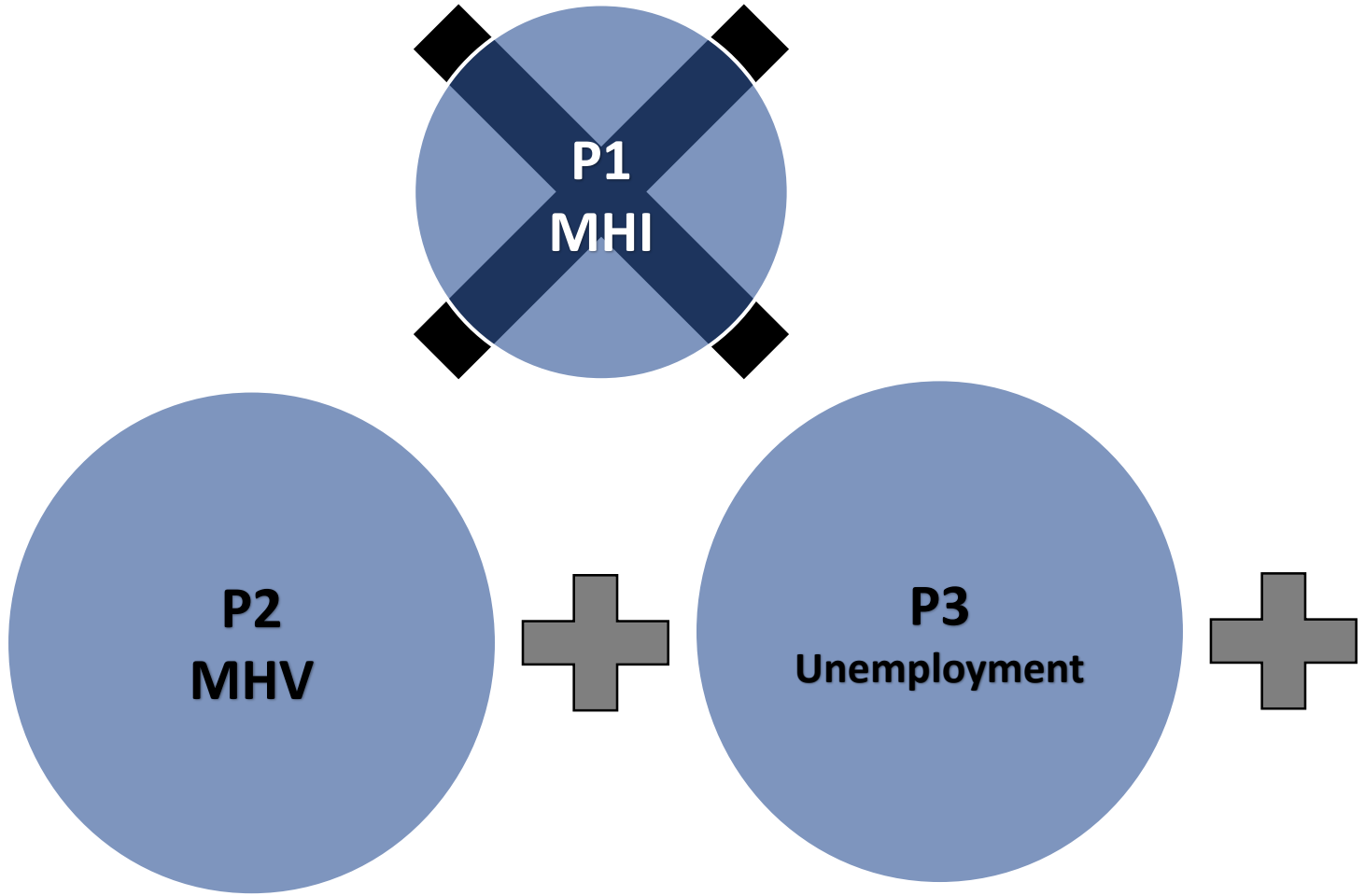
P2
MHV

P3
Unemployment

Two of the following:

- **S1** County MHI
- **S2** Population
- **S3** AV
- **S4** Debt/tap/ MHV
- **S5** Rates/tap/ MHI

Test Three (qualifies)



Two of the following:

- **S1** County MHI
- **S2** Population
- **S3** AV
- **S4** Debt/tap/ MHV
- **S5** Rates/tap/ MHI

DON'T DO THIS!

- Joe, you live close to the Town of Blue Ball, Ohio. What do you think?
- I've driven through the Town of Knockemstiff, Ohio, they are not poor.

Examples

Example One

Town of Dinosaur

P1 — **MHI = unreliable**

P2
MHV = $101,900 (less than State)

+

P3
= job loss of 862

+

DAC = Qualify, Category I

Two of the following:

- **S1** County MHI — **No**
- **S2** Population — **Yes**
- **S3** AV — **Yes**
- **S4** Debt/tap/ MHV — **Yes**
- **S5** Rates/tap/ MHI — **No**

Example Two

City of Idaho Springs

P1

MHI =
≤ 80% of State MHI

P2

MHV =
≤ State MHV

P3

Job Loss =
< 0%

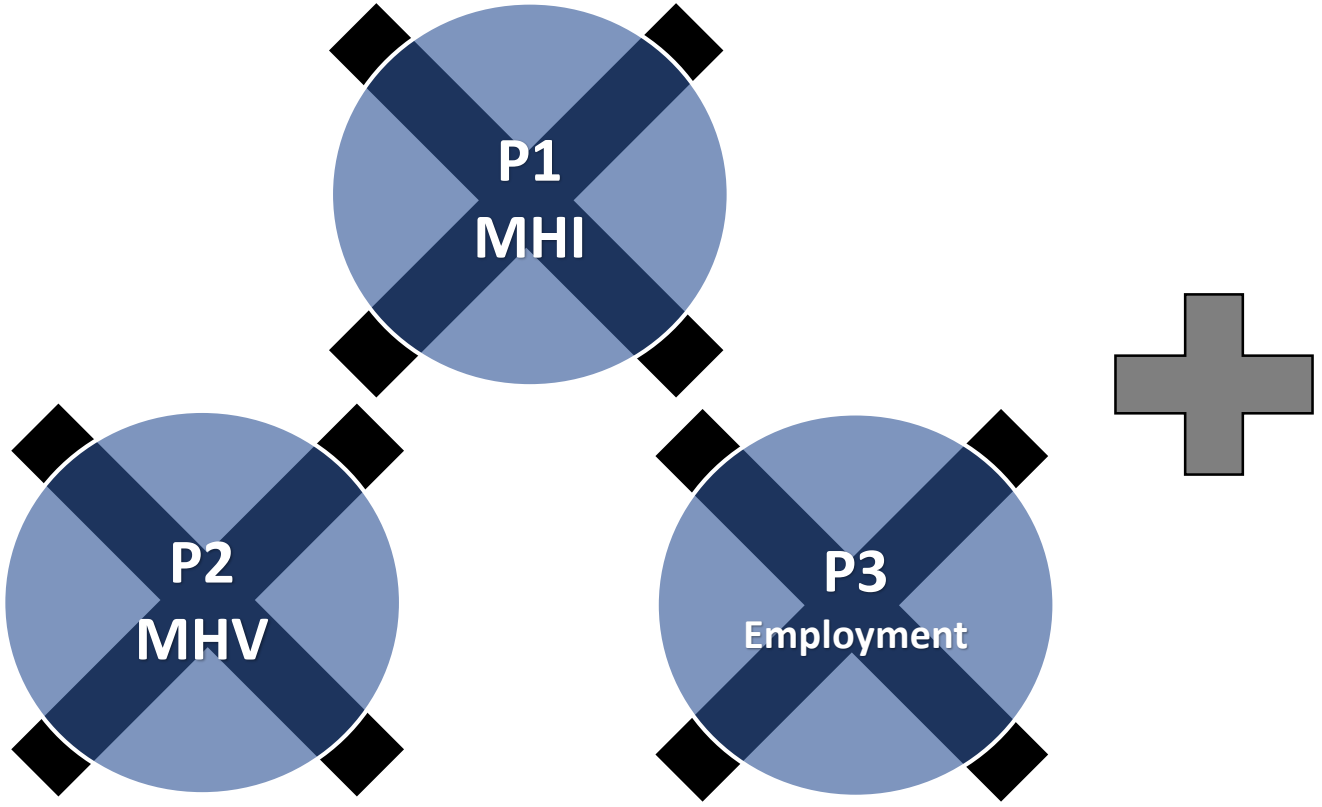
S4 and S5?

S1	County MHI	**No**
S2	Population	**No**
S3	AV	**No**
S4	Debt/tap/ MHV	**Yes**
S5	Rates/tap/ MHI	**Yes**

DAC = Qualify, Category II

Example Three

Town of Breckenridge



DAC = Don't qualify

Two of the following?

- **S1** County MHI — **No**
- **S2** Population — **No**
- **S3** AV — **No**
- **S4** Debt/tap/ MHV — **Yes**
- **S5** Rates/tap/ MHI — **No**

Business Case

Town of Lake City

P1

MHI = unreliable

MHV = ACS over

P2
Parcel data obtained from County met benchmark and supported Town's claim

P3
Employment

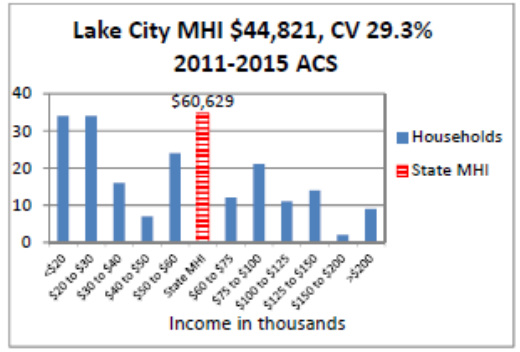
DAC = Business Case

Two of the following:

S1	County MHI	**No**
S2	Population	**Yes**
S3	AV	**No**
S4	Debt/tap/ MHV	**No**
S5	Rates/tap/ MHI	**Yes**

Recommendation:	**APPROVAL**				
Applicant:	Town of Lake City	**Funding sources:**	Est. WPCRF Loan:		$750,000
Est. Project Total:	$1,500,000		EIAF (not yet applied):		$750,000
Est. Amount of Loan:	$750,000		Total:		$1,500,000
Pledge:	Water and Sewer System Revenue				

Project Description: The proposed project addresses deficiencies in collection system lines as well as examines the existing treatment facilities to determine if there are deficiencies that need addressing as well.



Factor	Entity	Benchmark	Qualify?	Business Case
P1: MHI	$44,821	<$48,503	N	MHI figures based on ACS and previous income survey results of $35,513 are under the benchmark, but are not reliable enough to use.
P2: MHV	$269,500	<$247,800	N	Parcel data obtained from the Hinsdale County Assessor shows a median actual value of $242,685 for residential properties within Town boundaries.
P3: Job loss	-10.5%	<0.0%	Y	49 jobs lost in the past 10 years.
S1: County MHI	$57,083	<$48,503	N	Town believes ranches in surrounding area are not indicative of the local community.
S2: Population change	-11.51%	<0.0%	Y	A loss in jobs over the past 10 years has most likely lead to a loss of population.
S3: AV/Households	$38,454	<$18,500	N	More than twice the benchmark. Up to 75% second homes.
S4: Current system debt	0.42%	>1.24%	N	Current debt does not meet the benchmark. The Town anticipates borrowing approximately $750,000. If this amount increases to $950,000 at time of application, the benchmark will be met.
S5: Current system cost	3.08%	>2.21%	Y	Combined system is in the 4th quartile as compared to other systems in the state and ranks among the most expensive per household.

Recommendation:
The Town does not meet the definition of DAC as it meets or exceeds only one primary factor and two secondary factors. While the MHI from both ACS data as well as a previous income survey is below the benchmark, neither is reliable enough to use as the area has many second homes, which makes it hard to receive survey responses. However, parcel data obtained from the assessor's office shows the Town meets the benchmark for Primary Factor 2. This, in addition to an already expensive system, a loss of jobs and a loss of population, indicates the disadvantage of the community that resides in the Town year-round. We therefore recommend approval of the Town's business case for meeting Disadvantaged Community criteria.

Explanation of Factors

P1: The Median Household Income of $44,821 from ACS data has only medium reliability with a CV of 29.3% (medium reliability = 12-40%). The Town attempted to complete an income survey in 2014/2015 for a DWRF loan, but DOLA was unable to certify results of $35,513. However, the Authority Board ultimately approved DAC status for the project. In addition, the sewer system has approximately 100 fewer taps than the drinking water system that was surveyed.

The Town noted 13% of the population lives in poverty and Lake City Community School has 38% free and reduced lunch rates.

P2: Median Household Value from ACS is reliable with a CV of 4.6%. However, the Town indicated the $269,500 figure seemed high. County assessor data obtained shows 308 parcels within town boundaries with a median actual value of $242,685, which meets the benchmark for this factor.

P3: Jobs county-wide have declined overall in the last ten years by 10.5%. The Town noted a large portion of the population is made up of retirees. Point 3 in the attached email shows 114 jobs are identified as retiree and on a fixed income. State Demography statistics confirms 114 jobs of the local industry are related to retirees, but this figures is actually how many jobs are derived from retiree spending.

The Town provided anecdotal information regarding jobs in the Town. Camp Redcloud closed operations approximately 4 years ago which resulted in a loss of 20,000 campers/parents/visitors per year to the area. While the camp was purchased later on, it never re-opened and is currently listed on the market.

S1: The County-wide MHI is higher overall at $57,083. The Town suggested this may be due to ranches located in the surrounding area and isn't indicative of the Town's resources.

S2: The Town's population has decreased 11.5% over the past ten years.

S3: The Town has a high assessed value per household of $38,454 when compared to the state benchmark of $18,500. The bulk of the Town's assessed value is derived from residential (55%), commercial (22.7%) and vacant (19.6%). The Town noted up to 75% of the homes are second homes, which reduces the availability of affordable housing. Having a large seasonal population also means the infrastructure is fully utilized only part of the year, but must be available year-round to service permanent residents.

S4: At 0.42%, the Town has manageable debt per tap per MHV when assessed against the state median benchmark of 1.24% for combined systems. The Town has completed recent drinking water projects by obtaining a combination of a DWRF loan, EIAF grants and principal forgiveness; thus keeping this debt ratio down.

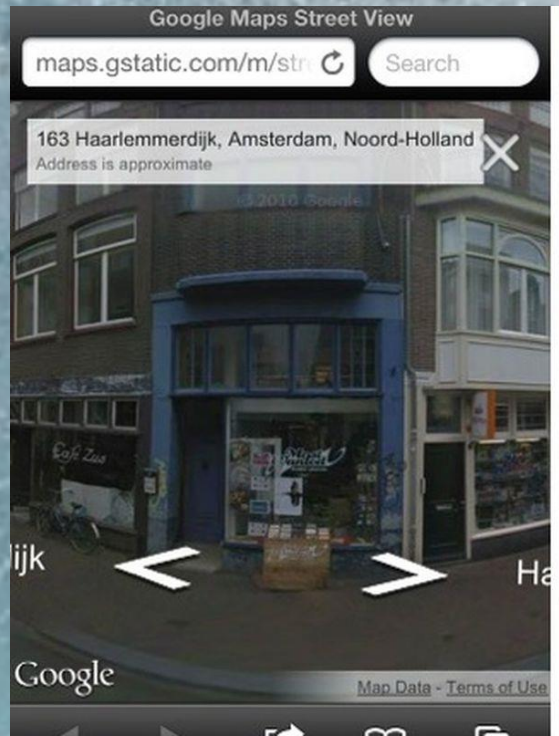
As the Town looks to complete the proposed wastewater project, it anticipates an additional $750,000 in joint water and sewer debt. While the total project costs have yet to be determined and grants need to be secured, should the Town take on additional debt of $950,000, it will meet/exceed the benchmark for this criteria.

S5: An increase in overhead charges in the past year has increased system operating costs by 13%. While the system was already over the state benchmark, this increase has pushed it into the 4th quartile at 3.08% compared to 2.21% for other combined systems in the state.

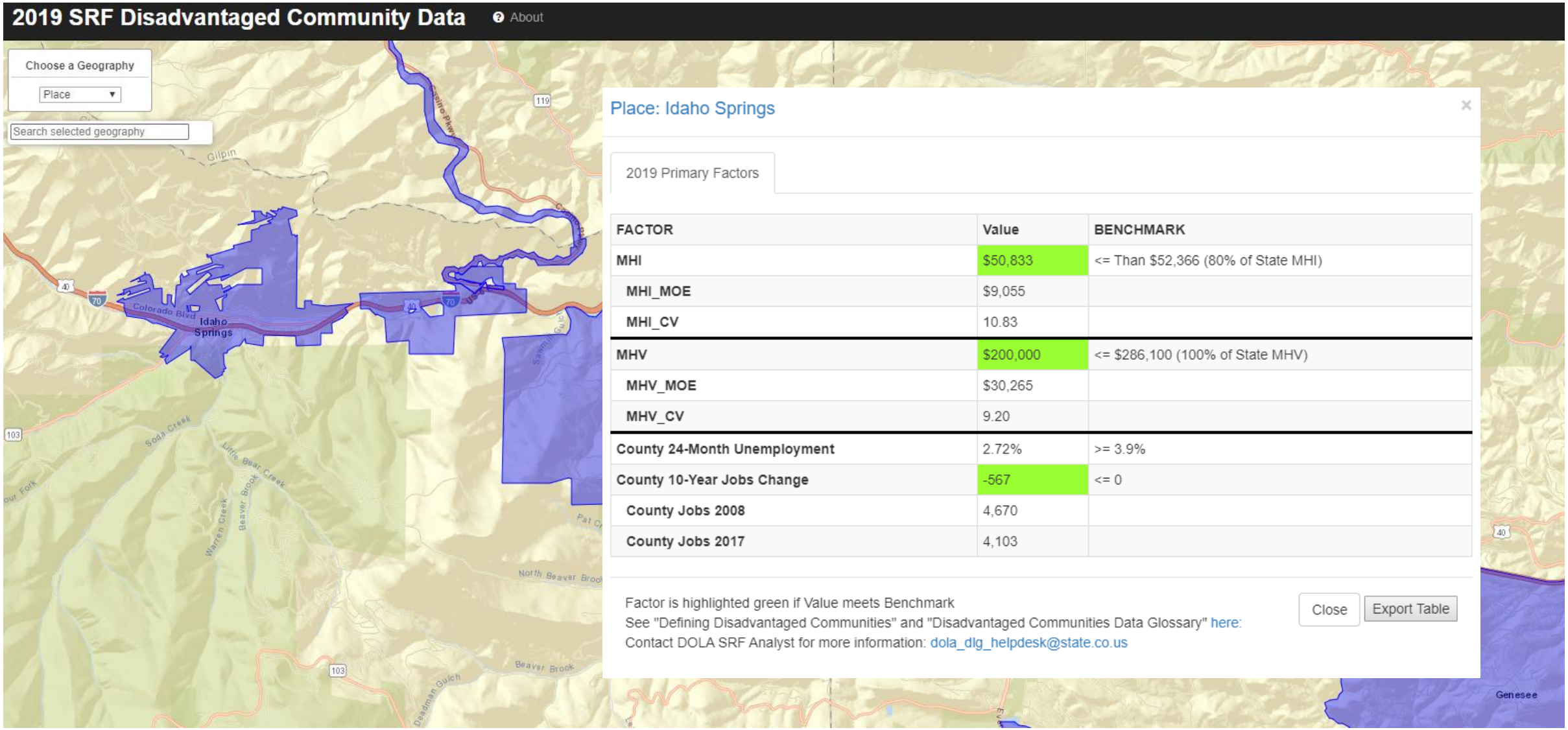
Please see the Town's attached email regarding DAC status for the community.

Don’t do this!

Google Maps: Modern
Version of the windshield test



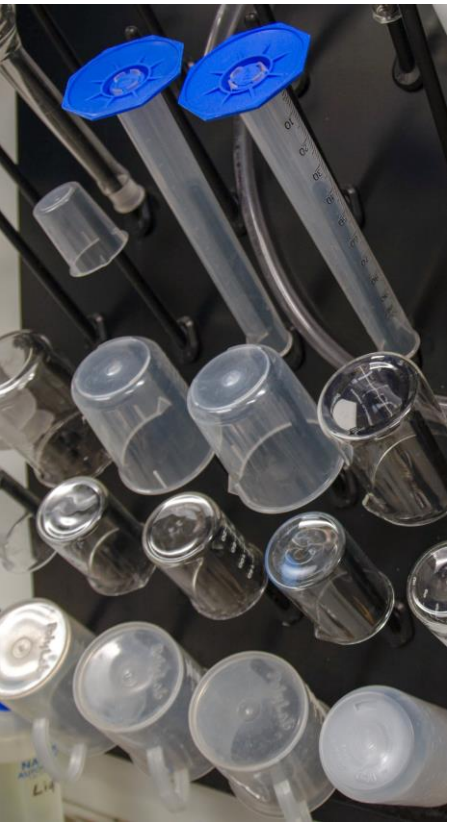
Interactive SRF Map



FACTOR	Value	BENCHMARK
MHI	$50,833	<= Than $52,366 (80% of State MHI)
MHI_MOE	$9,055	
MHI_CV	10.83	
MHV	$200,000	<= $286,100 (100% of State MHV)
MHV_MOE	$30,265	
MHV_CV	9.20	
County 24-Month Unemployment	2.72%	>= 3.9%
County 10-Year Jobs Change	-567	<= 0
County Jobs 2008	4,670	
County Jobs 2017	4,103	

Continual Improvment
Changes Implemented, 2017-Present

- DAC Subcommittee – Ongoing Review
- DAC status qualification (moved to later in process)
- Supplemental funding receives same qualification
- Substitution of reliable Block Group/Census Tract data for unreliable higher-level data
- Use of data if entire range falls within benchmark



Going Forward

Possible Changes

- One category for all DAC communities (simplify)
- Change threshold for benchmarks
- No change
- EPA criteria changes
- Business Case process refinement

Colorado Water Resources and Power Development Authority

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