



Rural Arizona Access to Buprenorphine

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Arizona Center for Rural Health

Since 1980 the AzCRH mission is to improve the health & wellness of rural and vulnerable populations.

State Office of Rural
Health (1990 State:
Fed HRSA)

Rural Hospital
Flexibility Program
(est. 1999 HRSA)

Workforce Data &
Analysis (with
AHEC)

Access to Care

“The timely use of personal health services to achieve the best health outcomes”
(IOM 1993)

- Affordability: facilitates entry into the health care system. Uninsured people are less likely to receive medical care and more likely to have poor health.
- Availability: Having a usual source of care with the requisite resources (staff, equipment, etc.).
- Accommodation: Timely ability to provide health care when the need is recognized, in a way that meets client preference and need.
- Acceptable: Care is culturally appropriate, and client is comfortable.
- Accessible: Services (workforce) are geographically proximal.

<https://www.ahrq.gov/research/findings/nhqrd/charbooks/access/elements.html>

Wyszewiansky. 2002. “Access to Care: Remembering Old Lessons” <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1464050/>

Why Access Matters

- No treatment
- Delayed treatment
- Wrong treatment
- Unnecessary treatment
- Expensive treatment

Provider Shortages

- Too few total providers
- Imbalance among specialties relative to health care needs
- Geographic maldistribution

Geographic Accessibility

- Far = less likely to receive care
- Disproportionately affects low-income, low-literacy, older, and minority communities.
- Other costs: economic, social, time, etc.
- Decreases non-acute care (mental health, screenings, etc.)
- HHS: >30 minutes travel = excessively distant

<https://research.gsd.harvard.edu/hapi/files/2014/10/HAPI-ResearchBrief-Geographic-Healthcare-Access-102814-FINAL.pdf>

Proximity Matters for Medication for Opioid Use Disorder (MOUD)

- Methadone only in licensed clinics - OTPs
- Daily / near daily dosing – observed dosing
- DEA waiver requirements for prescribing providers

Evidence base for MOUD

A medication-first approach

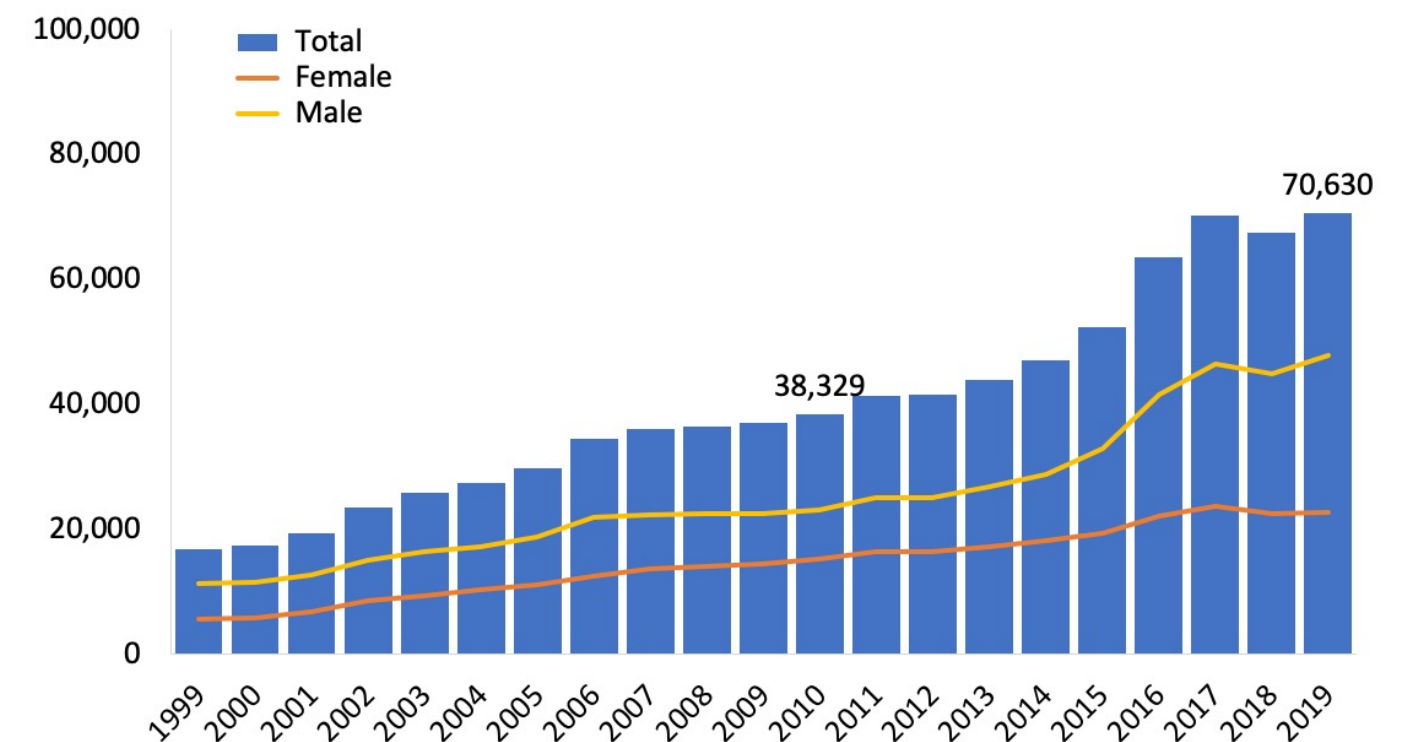
- Recommended first-line treatment: AA Addiction Psychiatry, AMA, NIDA, SAMHSA, CDC, and others
- Effective: reduces overdose, street drug use, infectious disease, relapse
- Customizable: agonists, partial agonists, antagonists in multiple formulations
- Not addiction trading: dependence is not OUD
- Not short term: MOUD for >1 year has best results
- Assists recovery: bridges biological and behavioral components of addiction

Need for MOUD

- 2017, HHS declared opioid overdoses a public health emergency
- 2020, 30% increase in overdose deaths (>93k)
- 70% of fatal overdoses linked to opioids, primarily fentanyl

<https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm>

**Figure 1. National Drug-Involved Overdose Deaths*
Number Among All Ages, by Gender, 1999-2019**



*Includes deaths with underlying causes of unintentional drug poisoning (X40–X44), suicide drug poisoning (X60–X64), homicide drug poisoning (X85), or drug poisoning of undetermined intent (Y10–Y14), as coded in the International Classification of Diseases, 10th Revision. Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2019 on CDC WONDER Online Database, released 12/2020.

<https://www.drugabuse.gov/drug-topics/trends-statistics/overdose-death-rates>

MOUD Maldistribution

- OTPs

- Methadone approved in 1974 for treatment
- Around 1,700 OTPs in US (56 with public access in AZ)
- Number of OTPs flat since early 2000s

- Buprenorphine / OBOTs

- DATA 2000 - Bup (x) waivers issued in 2002
- 2002-2011 US counties with MOUD increased from 27% to 76%
- By 2012, bup treatment capacity is 3.5x that of methadone
- 2016 NPs/PAs can prescribe bup
- 89% of providers have ever prescribed bup, 56% are receiving new patients

- Rural access

- Rural residents drive 6x longer to OTP
- About 4% of rural physicians have x-waivers
- Increases in rural MOUD mostly from NPs
- 2017-2019 bup waivers in 358 additional counties, 80% of which were rural

STUDY FINDINGS

Check for updates

Federally Qualified Health Centers Can Expand Rural Access to Buprenorphine for Opioid Use Disorder in Arizona

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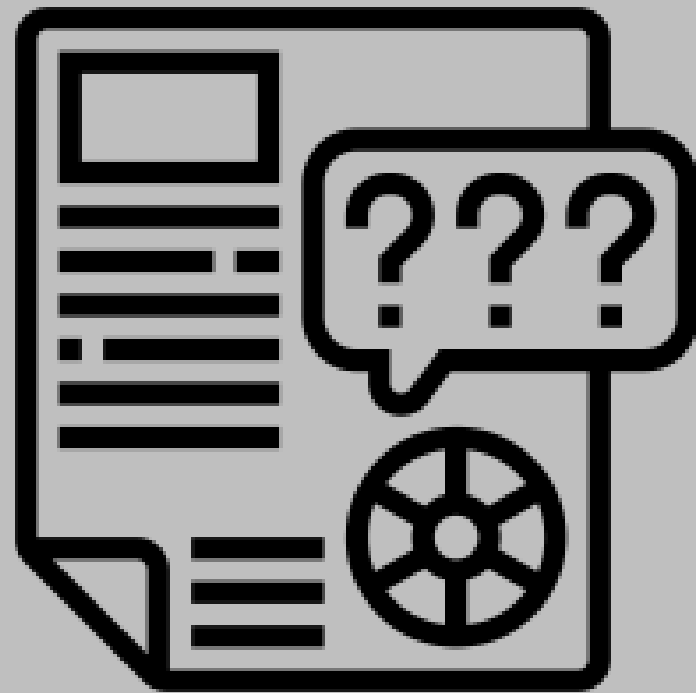
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ABSTRACT: Medication for Opioid Use Disorder (MOUD) is recommended, but not always accessible to those who desire treatment. This study assessed the impact of expanding access to buprenorphine through federally qualified health centers (FQHCs) in Arizona. We calculated mean drive-times to Arizona opioid treatment (OTP) locations, office-based opioid treatment (OBOT) locations, and FQHCs clinics using January 2020 location data. FQHCs were designated as OBOT or non-OBOT clinics to explore opportunities to expand treatment access to non-OBOT clinics (potential OBOTs) to further reduce drive-times for rural and underserved populations. We found that OTPs had the largest mean drive times (16.4 minutes), followed by OBOTs (7.1 minutes) and potential OBOTs (6.1 minutes). Drive times were shortest in urban block groups for all treatment types and the largest differences existed between OTPs and OBOTs (50.6 minutes) in small rural and in isolated rural areas. OBOTs are essential points of care for opioid use disorder treatment. They reduce drive times by over 50% across all urban and rural areas. Expanding buprenorphine through rural potential OBOT sites may further reduce drive times to treatment and address a critical need among underserved populations.

KEYWORDS: Opioid substitution treatment, health services accessibility, geographic information systems, opioid-related disorders

<https://journals.sagepub.com/doi/pdf/10.1177/11786329211037502>

Research Questions



How are MOUD sites distributed in Arizona?

How do drive times differ across MOUD sites by rurality?

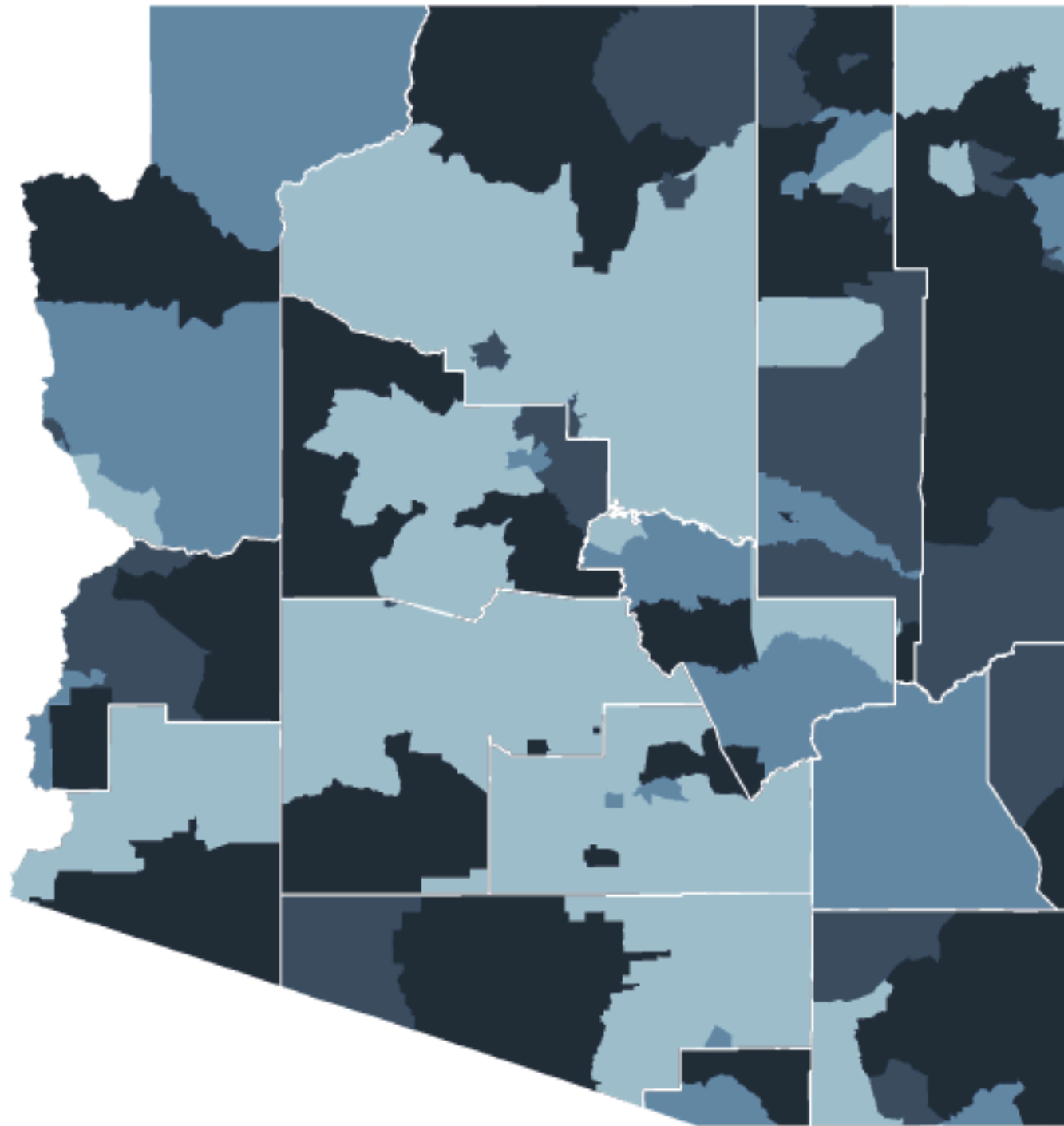
Would increasing waived providers at FQHCs increase access to MOUD?

METHODS

- GIS Driving times computed from block group population centers to their nearest OTP, OBOT, and Potential OBOT location
- Block groups stratified by Rural-Urban Commuting Area (RUCA) codes

SAMPLE

- 4,168 population centers
- 58 OTPs
- 149 FQHCs (71 = OBOT / 78 = Potential OBOT)
- 1,104 DATA-waived providers / 941 OBOT locations



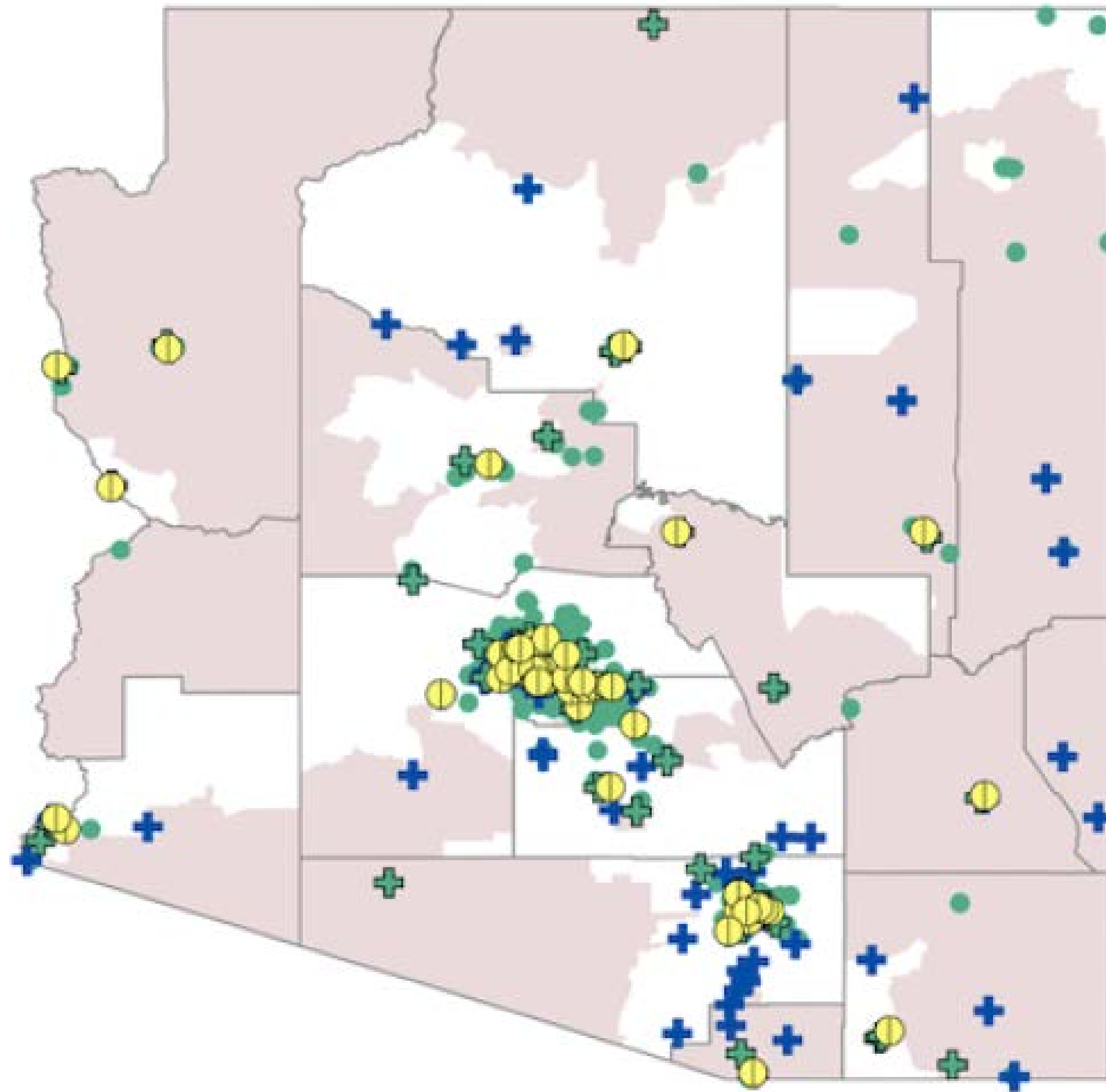
2018 Population






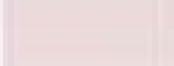
Urban: 92%

Large Rural: 5%

Small Rural: 2%

Isolated Rural: 1%



-  OTP
-  FQHC with Waived Provider
-  FQHC
-  Waived Provider
-  Urban Tracts
-  Rural Tracts

Opioid Treatment Drive Times

Mean Drive Time, Minutes			
Block group Classification	To OTP	To OBOT	To Potential OBOT
All (n=4168)	16.4	7.1	6.1
Urban (n=3683)	11.3	5.5	4.8
Large Rural (n=239)	31.7	11.2	10.3
Small Rural (n=146)	70.7	20.1	15.3
Isolated (n=100)	87.5	36.9	29.7



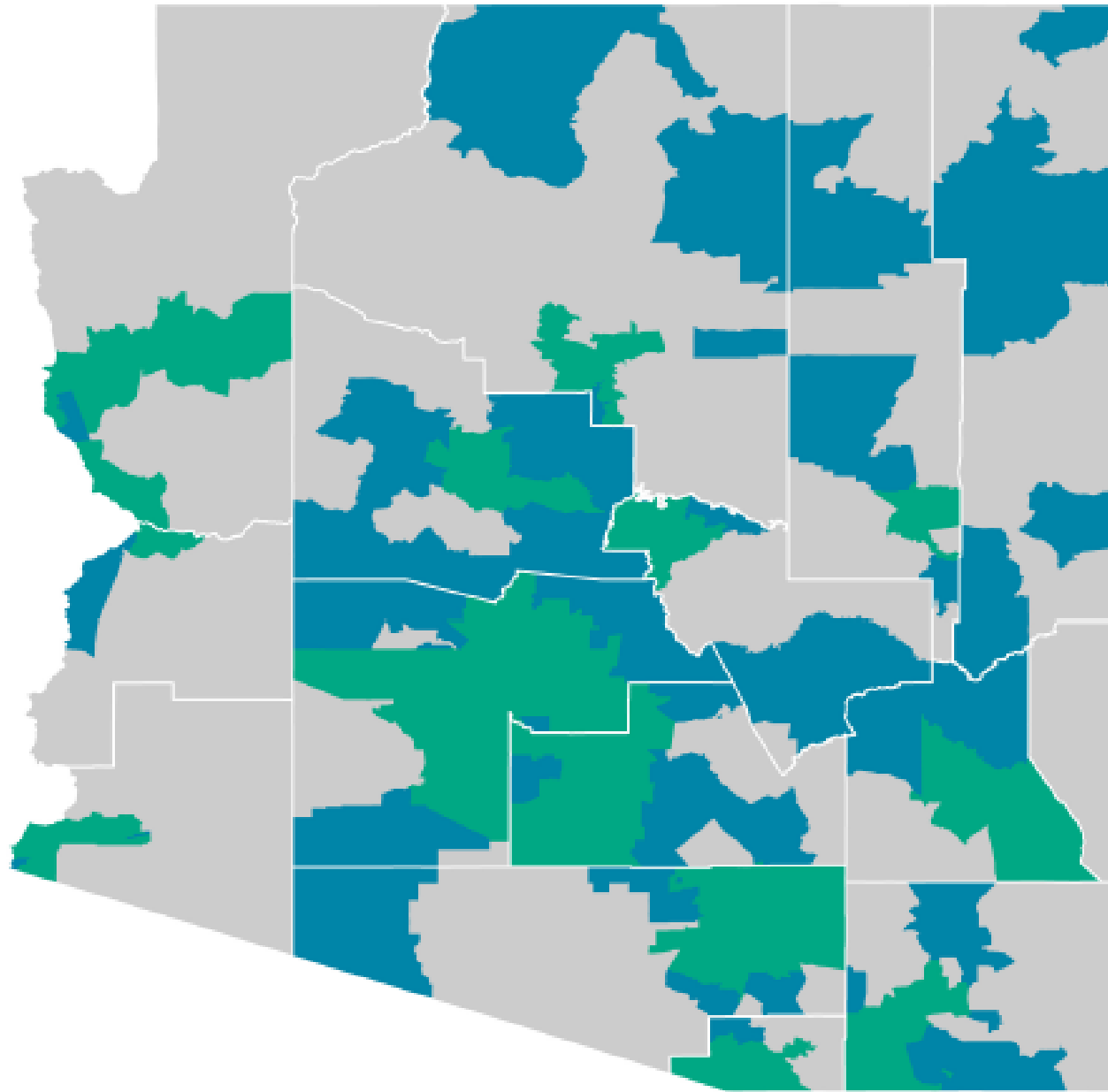
KEY TAKEAWAYS

OBOT locations can reduce drive times by over 50% across all urban and rural areas compared with OTPs.

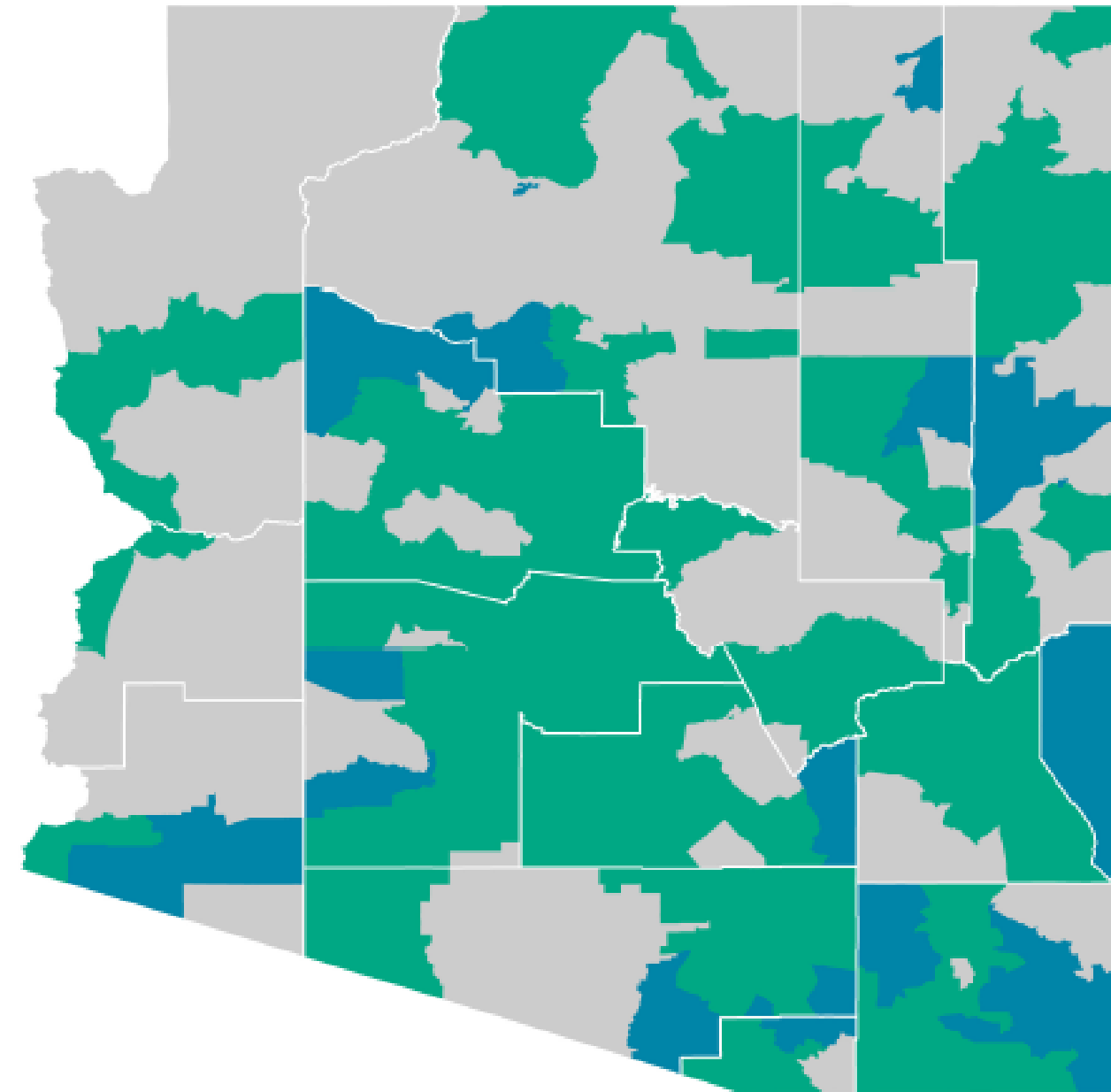
Potential OBOT locations significantly improved driving times across RUCAs, with biggest improvements in isolated rural locations.

RURAL GAINS

- 3,733 (91%) of block groups are located within a 30-minute drive to an OTP.
- An additional 276 block groups (4,009, 96%) are located within a 30-minute drive to an OBOT.
- 52 additional block groups are located within a 30-minute drive of potential OBOTs (4,060, 97%).



1. Blocks where residents can access an OTP (green) or OBOT (blue) within 30 minutes



2. Blocks where residents can access an OTP/ OBOT (green) or potential OBOT (blue) within 30 minutes

Training and Assistance Options

- AzMAT Mentors

<https://crh.arizona.edu/mentor>

- MAT ECHO

<https://chs.asu.edu/project-echo/join/medication-assisted-treatment>

- OARLine – Opioid Assistance and Referral Line

1-888-688-4222

<https://www.azdhs.gov/oarline/>

- PCSS – Providers Clinical Support System

<https://pcssnow.org/>



Thank you

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