FINAL COMMUNITY INVOLVEMENT PLAN
TWIN CITIES ARMY AMMUNITION PLANT
RAMSEY COUNTY, MINNESOTA

Prepared Under:

U.S. Army Environmental Command
2450 Reynolds Road, Building 2266
Fort Sam Houston, Texas 78234
Contract No. W912PL-16-D-0042

U.S. Army Corps of Engineers, Los Angeles District
915 Wilshire Boulevard, Suite 930
Los Angeles, California 90017

Prepared by:

DAWSON

Dawson Technical, LLC
112 E Pecan Street, Suite 300
San Antonio, Texas 78205

August 2019

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Reviewed and Approved by:

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This document should be used only with the approval of the United States Army Environmental Command (USAEC) and Twin Cities Army Ammunition Plant.

August 2019

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LIST OF ACRONYMS

AOC	Area of Concern
AR	Army Regulation
ARAR	Applicable or Relevant and Appropriate Requirement
Army	Department of the Army
ATK	Alliant Techsystems Inc.
BD/DR	Building Demolition/Debris Removal
CC	Compliance-related Cleanup
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CIP	Community Involvement Plan
COC	Contaminant of Concern
CRP	Compliance Restoration Program
DD	Decision Document
DERP	Defense Environmental Restoration Program
DMM	Discarded Military Munitions
DoD	Department of Defense
EBS	Environmental Baseline Survey
EE/CA	Engineering Evaluation/Cost Analysis
ESD	Explanation of Significant Differences
FCC	Federal Cartridge Company
FFA	Federal Facilities Agreement
FY	Fiscal Year
GAC	Granular Activated Carbon
GOCO	Government Owned, Contractor Operated
HRS	Hazard Ranking System
IRA	Interim Remedial Action
IRP	Installation Restoration Program
LTM	Long-Term Management
LUC	Land Use Control
LUCRD	Land Use Control Remedial Design
MC	Munitions Constituents
mm	Millimeters
MMRP	Military Munitions Response Program
MNA	Monitored Natural Attenuation
MPCA	Minnesota Pollution Control Agency
MR	Munitions Response
MRSPP	Munitions Response Site Prioritization Protocol
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NFA	No Further Action
NPL	National Priorities List
OU	Operable Unit
PA	Preliminary Assessment
PAH	Polycyclic Aromatic Hydrocarbon
PCB	Polychlorinated Biphenyls
PGRS	Plume Groundwater Recovery System

POC	Point of Contact
POL	Petroleum, Oil and Lubricants
PP	Proposed Plan
RAB	Restoration Advisory Board
RA-C	Remedial Action-Construction
RA-O	Remedial Action-Operation
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RI/FS	Remedial Investigation/Feasibility Study
RIP	Remedy-in-Place
ROD	Record of Decision
SARA	Superfund Amendments and Reauthorization Act
SI	Site Investigation
SVE	Soil Vapor Extraction
SVOC	Semi-Volatile Organic Compound
TAPP	Technical Assistance for Public Participation
TASC	Technical Assistance Services for Communities
TCAAP	Twin Cities Army Ammunition Plant
TGRS	TCAAP Groundwater Recovery System
TRC	Technical Review Committee
USC	United States Code
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
UST	Underground Storage Tank
UU/UE	Unlimited Use/Unrestricted Exposure
UXO	Unexploded Ordnance
VOC	Volatile Organic Compound

1.0 OVERVIEW OF COMMUNITY INVOLVEMENT PLANS

The Department of the Army (Army) has prepared this Community Involvement Plan (CIP) for the Defense Environmental Restoration Program (DERP) at Twin Cities Army Ammunition Plant (TCAAP) in Arden Hills, Ramsey County, Minnesota. The CIP provides guidance for public involvement associated with the Installation Restoration Program (IRP) and Compliance Restoration Program (CRP), formerly compliance-related cleanup (CC), sites at TCAAP. Active sites within the program are currently in various phases of remedial action activities.

The Army has prepared the TCAAP CIP in accordance with current United States Environmental Protection Agency (USEPA) guidance. The community involvement requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986, and the Resource Conservation and Recovery Act (RCRA) of 1976, as amended by the Hazardous and Solid Waste Act of 1984, are outlined herein.

1.1 Purpose

Effective communication, and the timely exchange of information are essential for maintaining community understanding of and support for TCAAP cleanup activities, and to ensure effective community involvement. The purposes of the community involvement process are to:

- Establish effective methods for informing the community of installation cleanup program actions;
- Solicit input and identify concerns that the local community may have regarding current and future cleanup program activities; and
- Maintain a strategy that supports pro-active, two-way communication between the Army and the local community.

Two-way communication and public involvement activities between the Army installation and the local community are identified in this CIP. It also identifies the target audiences including local community members and neighbors; installation residents and tenants; federal, state, and local officials and agencies; and local businesses and civic interest groups, and the media.

2.0 INSTALLATION AND CLEANUP BACKGROUND

2.1 Installation Location and Description

TCAAP is located in Arden Hills, Minnesota, within the Minneapolis-St. Paul metropolitan area, in Ramsey County. Surrounding cities include Arden Hills, New Brighton, Shoreview, and Mounds View. When TCAAP was placed on the National Priorities List (NPL) in 1983, it occupied approximately 2,370 acres in northwest Ramsey County. Since 1983, some of the property has been transferred outside of federal ownership to Ramsey County and the city of Arden Hills. Control of two other portions of the federally-owned property has been re-assigned to the National Guard Bureau and Army Reserves. TCAAP no longer has a production mission, and the remaining acres of TCAAP are in various stages of being transferred. For the purposes of this CIP, references to TCAAP include all of the Army-owned installation property in 1983, which is also referred to as operable unit (OU) 2. The location of TCAAP is shown on **Figure 1**.

2.2 History of Installation Operations

Construction of TCAAP began in August 1941 on a site that was primarily farmland; field construction was completed by 1943. It was originally established as the Twin Cities Ordnance Plant, then was re-designated the Twin Cities Arsenal in 1946, the Twin Cities Ordnance Plant in 1961, and the Twin Cities Army Ammunition Plant in 1963. Upon completion of all field construction, the facility had over 300 structures, including five major production buildings, numerous auxiliary buildings, and supporting utilities. The primary functions of the facility were the manufacture of small caliber ammunition and related materials and 105 millimeter (mm) and 155mm projectile metal parts, the proof testing of small caliber ammunition, the storage and handling of strategic and critical raw materials for other government agencies, and various nonmilitary tenant activities. Production began in 1942 and then alternated between periods of activity and standby related to wars, with the majority of the ammunition manufacturing occurring during World War II, the Korean Conflict, and the Southeast Asia Conflict. The last manufacturing operations ceased in 2005.

TCAAP has historically been a government-owned, contractor-operated (GOCO) installation. The primary operating contractor was Federal Cartridge Company (FCC), although TCAAP was operated by the federal government from 1946 to 1950. One major tenant, Alliant Techsystems Inc. (ATK),

now Northrup Grumman Innovation Systems, manufactured fuses and selected ammunition at TCAAP beginning in the late 1950s. Besides ATK, more than 61 tenants occupied space at TCAAP throughout its history, many for only a short time.

During periods of activity, solvents were utilized as part of some manufacturing operations. Disposal of solvents and other wastes at the TCAAP property resulted in soil and groundwater contamination. Groundwater contamination has migrated beyond the original TCAAP boundary. Groundwater contamination was first discovered in July 1981, which led to investigation of the soil and groundwater on and off the TCAAP property. It was determined that TCAAP was the source of contamination, and so the TCAAP property and area of affected groundwater contamination was placed on the NPL in 1983 as the New Brighton/Arden Hills Superfund Site. The NPL is a list of national priorities among the known or threatened releases of hazardous substances throughout the United States. The Army, the USEPA, and the Minnesota Pollution Control Agency (MPCA) then worked jointly to determine the contaminants involved, the extent of the contamination, the extent of the offsite groundwater plumes, and to address the contamination through implementation of various interim response actions and remedial actions. Preventing human health risks and minimizing and remediating environmental impacts are the primary concern of the Army, the MPCA, and the USEPA.

2.3 Overview of the Army Cleanup Program

The DERP was formally established by Congress in 1986 and provides for the cleanup of Department of Defense (DoD) sites under the jurisdiction of the Secretary of Defense. The key objective of the cleanup program is to reduce, or eliminate when possible, threats to human health and the environment that result from historical use or disposal practices. There are three environmental restoration activities categorized under DERP: the IRP, the Military Munitions Response Program (MMRP), and the Building Demolition/Debris Removal (BD/DR) program. Additionally, CC addresses cleanup requirements that are legally mandated but not eligible for funding under DERP.

The IRP is a comprehensive program to address required response actions for releases of hazardous substances and pollutants or contaminants; petroleum, oil and lubricants (POL); hazardous wastes or hazardous waste constituents; and explosive compounds released to soil, surface water, sediment, or groundwater as a result of ammunition or explosives production or manufacturing at ammunition

plants. The IRP category also includes response activities to address unexploded ordnance (UXO), discarded military munitions (DMM), or munitions constituents (MC) posing an explosive, human health, or environmental hazard that are incidental to an existing IRP site. DERP guidance requires that sites in the IRP be prioritized for cleanup based primarily on relative risk by grouping sites or areas of concern (AOCs) into high, medium, and low priority categories. Relative risk is evaluated using three factors: the contaminant hazard factor (i.e., the types of contaminants present and how hazardous they are); the migration pathway factor (whether the contaminants are moving, and in what direction); and the receptor factor (potential of humans or plants/animals to be exposed to the contaminants). For further information on how relative risk is evaluated for IRP sites, refer to the DoD *Relative Risk Site Evaluation Primer* (1996). TCAAP has 19 sites that currently fall under the IRP.

The MMRP addresses non-operational range lands that are suspected or known to contain UXO, DMM, or MC. In the MMRP, relative cleanup priorities are assigned using the DoD Munitions Response Site Prioritization Protocol (MRSPP) (32 Code of Federal Regulations [CFR] Part 179). Data are gathered during a comprehensive site evaluation to identify munitions contaminant types, sources, transport processes, receptors, and exposure pathways. The data are evaluated to determine if a munitions response (MR) area requires further investigation, and to assign a priority for subsequent action. TCAAP does not have any sites that fall within this category.

BD/DR refers to the demolition and removal of unsafe buildings and structures at facilities or sites that are or were owned by, leased to, or otherwise possessed by the DoD. TCAAP does not have any sites that fall within this category.

The CRP manages the cleanup of former CC program sites that include remediation of contamination at Army overseas facilities; cleanup of contamination resulting from operations that have occurred since October 1986 (non-DERP) at active Army, Army Reserve, and Army National Guard federally owned facilities; and cleanup at non-federally owned, federally supported Army National Guard facilities. CRP sites include releases from hazardous waste treatment, storage and disposal facilities or solid waste landfills undergoing RCRA closure, and releases from RCRA underground storage tanks in service prior to 1986. Like the IRP and MMRP, CRP follows RCRA

and CERCLA guidelines for cleanup and closure. TCAAP has one active site that currently falls within this category.

Each Army installation must implement a cleanup strategy that protects human health and the environment and reduces relative risk.

2.3.1 Phases of Cleanup Process

The investigation and restoration of sites contaminated by past practices is conducted in steps, or phases, with provisions for emergency removal actions or other rapid responses if an imminent danger to public health is identified. The main steps, or phases, in the cleanup process are briefly described below. The names used here are specific to the CERCLA process. The equivalent phase names used in the RCRA program are provided in **Appendix A**.

- **Preliminary Assessment (PA)** – This is the initial review and analysis of available information to determine whether a release is likely to have occurred. The PA describes the potential source and nature (type) of releases, includes a preliminary evaluation of threats to the health and welfare of the public and the environment, and recommends subsequent phases in the cleanup process. The relative risk is evaluated during this phase. The decision to close out a site may be made at the end of the PA phase if enough data exists to support that decision.

- **Site Inspection (SI)** – This phase is conducted for AOCs that are identified during the PA, or for munitions response areas. The SI determines the relative cleanup priority, characterizes the presence or absence of contamination, and determines the next appropriate phase. Screening level human health and/or ecological risk assessments may be performed for MMRP sites during this phase. A decision to close out a site may be made at the end of the SI phase if enough data exists to support that decision.

- **Remedial Investigation/Feasibility Study (RI/FS)** – The nature (types) and extent (vertical and horizontal boundaries) of the contamination, and severity of any threat to human health and environment are determined in the RI. Human health and/or ecological risk assessments are conducted during the RI phase.

Potential remedial (cleanup) alternatives are developed and evaluated during the FS phase to address any threats to human health and the environment. The remedial alternatives are evaluated based on an established set of USEPA criteria. The criteria evaluation allows the Army to identify the remedial alternative that best meets the applicable, relevant and appropriate requirements (ARARs) and mitigates threats to human health and the environment.

- The **Proposed Plan (PP)** is a synopsis of the RI/FS that summarizes for the public what the remedial alternatives are, how they were evaluated, how they compared to one another, and which alternative the Army identified as the preferred remedy. The PP is distributed to the public and to the regulatory community for review and comment before a final remedy is selected. A summary fact sheet also is made available to the public at this point in the process. After the public and relevant regulators' review and comment on the PP, the selected remedy is revised as needed and documented in a Record of Decision (ROD) or a Decision Document (DD). A ROD or DD is a legal document that specifies the selected remedy, its objectives, and its endpoint. While the Army is always a signatory to a ROD for one of its installations, federal or state regulatory signatures also may be required based on a site's NPL and/or RCRA status. Further information on this process is available in *A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents* (USEPA, July 1999).

- **Remedial Design (RD)** – This phase begins after the final remedy has been selected and documented in a ROD/DD. The RD phase includes establishing information and performance objectives, obtaining design information from the military installation, and discussing the design concept with technical experts.

- **Remedial Action-Construction (RA-C)** – The RA-C phase is the construction and/or implementation of the cleanup remedy noted in the ROD and designed in the RD phase. When the RA-C phase is complete, the Army classifies the site as Remedy-in-Place (RIP).

- **Remedial Action-Operation (RA-O)** – The RA-O phase takes place while the remedy is operating or in progress, and the performance of the remedy is monitored to measure progress toward the remediation goals.

- **Long-Term Management (LTM)** – Post-project activities such as long-term monitoring or LTM also may be required to document the continued effectiveness of the selected remedy. At the point in the restoration process when restoration goals have been met and No Further Action (NFA) is warranted, "closeout" occurs. For any site that is not restored to a condition that allows unlimited use/unrestricted exposure (UU/UE), the protectiveness of the remedy is reviewed during the five-year review process.

2.3.2 Regulatory/Policy

The DERP is the statutory authority that establishes an environmental restoration program for DoD. The scope of the DERP is defined in 10 United States Code (USC) § 2701(b), which states:

> *"Goals of the program shall include the following: (1) identification, investigation, research and development, and cleanup of contamination from a hazardous substance, or pollutant or contaminant; (2) correction of other environmental damage (such as detection and disposal of unexploded ordnance) which creates an imminent and substantial endangerment to the public health or welfare or to the environment; (3) demolition and removal of unsafe buildings and structures, including buildings and structures of the DoD at sites formerly used by or under the jurisdiction of the Secretary."*

When Congress established the DERP, they directed that DoD cleanup efforts be consistent with the CERCLA. CERCLA requires that cleanup efforts at federal facilities be conducted in accordance with, but not limited to, the requirements in Section 120, 42 USC § 9620 of CERCLA. Executive Order 12580 delegates authority for implementing CERCLA to various federal officials, including the DoD. In order to have a common framework for managing a national cleanup program, the Army uses CERCLA as the primary legislative authority for managing environmental cleanup, along with the regulations associated with it, called the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The Department of the Army is the lead agency responsible for all remedial

actions at Army installations that are not solely related to underground storage tanks (USTs). The USEPA Region V and the MPCA provide oversight of the cleanup program at TCAAP.

The RCRA regulates how the remedial actions, pertaining to solid and hazardous wastes and USTs, should be managed to avoid potential threats to human health and the environment. RCRA is implemented by the USEPA, but it allows for the authorization of the state governments to enforce hazardous waste regulatory programs. The role of the state is outlined in CERCLA § 120(f) and 40 CFR § 300.500, which affords the State an opportunity to participate in the planning and selection of the remedial action, including review of all applicable data in development of studies, reports, and action plans. Within this process, when a state promulgated environmental or facility siting law becomes an ARAR, the remedial action must meet that requirement, unless a waiver is invoked. This CIP is based on guidance for CERCLA cleanup activities, §§ 9601 to 9675, as implemented by the NCP 40 CFR Part 300.

In 1982, the 25-square-mile New Brighton/Arden Hills superfund site (which includes the entire four-square-mile TCAAP facility) was proposed for addition to the NPL. In September 1983, TCAAP was placed on the NPL with a Hazard Ranking Score (HRS) of 59.6. Sites that score higher than 28.5 on the HRS (a screening device to evaluate a site's relative threat to human health or environment) are eligible for inclusion on the NPL. Installations on the NPL are tracked under the USEPA Superfund Program and allow for further investigation by the USEPA under certain circumstances. A site can be deleted from the NPL if it is determined that no further cleanup response is required.

In December 1987, the Army, the USEPA, and MPCA entered into a federal facilities agreement (FFA). An FFA requires the installation to address all significant environmental releases under the CERCLA and RCRA. The general purpose of an FFA is to ensure that environmental impacts are thoroughly investigated, and necessary remedial action is taken to protect public health, welfare, and environment; establish a framework and schedule for response actions; and facilitate involvement of all parties in those actions. The regulatory driver for TCAAP is the interagency agreement/FFA associated with the NPL site.

2.4 Cleanup Program at TCAAP

The IRP was initiated at TCAAP in January 1978, followed by the CRP in June 1996. The Army and the State discovered chlorinated solvents in TCAAP and New Brighton drinking water supplies, indicating that TCAAP may be the source. Studies of TCAAP activities and groundwater were initiated and residents were supplied with alternate water supplies.

The New Brighton/Arden Hills Superfund Site has been divided into three areas designated "Operable Units." The TCAAP IRP sites include OU1, OU2, and OU3. Operable Unit 1 (OU1) encompasses deep groundwater sometimes referred to as the "North Plume." Operable Unit 2 (OU2) includes soil, sediment, surface water, and groundwater contamination on the area that comprised TCAAP in 1983 when the Site was placed on the NPL. OU2 also includes the Site A groundwater plume that extends off the north end of the federally-owned property. Operable Unit 3 (OU3) consists of the deep groundwater sometimes referred to as the "South Plume." RODs have been signed for each of these three OUs. A total of 27 IRP sites have been identified throughout TCAAP, of which eight have been closed out. Currently, TCAAP has 19 active IRP sites and one active CRP site.

Restoration sites at TCAAP include areas impacted by historical activities such as disposal of solvents and other wastes, landfills, burn areas, and firing range activities. Contaminants of concern (COCs) for IRP sites include explosives, metals, polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs), semi-volatile organic compounds (SVOCs), and volatile organic compounds (VOCs) influencing the groundwater, sediment, soil, and surface water. The COCs for the CRP site are metals and PAHs influencing the soil. Individual site cleanup/exit strategies for the IRP and CRP sites are discussed in Section 3.0.

In accordance with DoD guidance (DoD Manual 4715.20, March 2012) and Army environmental regulation (AR 200-1, 2007), this installation-specific CIP is an integral requirement of the IRP and is implemented by Army personnel. The plan serves as a guide and toolbox for IRP-related personnel and contractors, as well as for installation officials and personnel, in their efforts to inform and involve the local community. This plan is available to the public as part of the Administrative Record and Information Repository. Information Repository and Administrative Record locations and contact information are provided in **Appendix B**.

3.0 ACTIVE CLEANUP SITES AT TCAAP

The schedule for active TCAAP IRP sites are summarized in **Table 1**. The schedule for the active CRP site is summarized in **Table 2**. Site descriptions and cleanup/exit strategies are discussed in the following sections.

3.1 Burial/Burn Area (Site A) (TCAAP-01)

Site TCAAP-01, referred to as the Burial/Burn Area (Site A), consists of 12.3 acres that was used between the early 1940s and 1966 for burial and/or burning of wastes, such as sewage sludge, solvents, explosive-containing wastes, and mercury crack cases. The COCs at TCAAP-01 are metals and VOCs in the soil and groundwater.

From 1988 to 1994, a groundwater interim remedial action (IRA) was conducted that consisted of an extraction well near the source area with granular activated carbon (GAC) treatment and surface discharge. In 1994, a new IRA, consisting of eight extraction wells and discharge to the publicly-owned treatment works, was implemented to prevent off-site migration of VOCs in groundwater. The OU2 ROD was finalized in 1997 and made this system part of the final remedial action. The ROD also specified excavation, stabilization, and off-site disposal of the metals-contaminated soil to site-specific cleanup levels. Multiple soil removal actions have been completed at TCAAP-01. In 2000, four extraction wells were turned off as the plume had reduced in size. In 2008, operation of the extraction system was suspended for evaluation of Monitored Natural Attenuation (MNA). In 2009, the ROD was amended by an Explanation of Significant Differences (ESD) to clarify land use controls (LUCs) for groundwater. In 2013, subsurface soil vapor sampling along County Road I did not identify any concerns. In 2017, OU2 ROD Amendment #6 formally changed the groundwater extraction remedy to MNA. The cleanup/exit strategy at TCAAP-01 is continued MNA, LUCs, and Five-Year Reviews until site-specific cleanup goals are achieved.

3.2 Open Burn/Disposal Area (Site C) (TCAAP-05)

Site TCAAP-05, referred to as the Open Burn/Disposal Area (Site C), consists of 6.4 acres that was used for burning scrap wooden boxes, solvents, oils, and production materials from 1947 through 1957. It was also used for land disposal and open storage. In 1997, a field demonstration project to

phytoremediate lead-contaminated soil was conducted at Site C. The project had the unintended consequence of contaminating groundwater and surface water with lead. The COCs at TCAAP-05 are metals in the soil, sediment, surface, water, and groundwater.

The Army operated a pump and treat system as an IRA in 2002. The 1997 OU2 ROD required excavation, stabilization, and off-site disposal of the contaminated soil to site-specific industrial levels at two sub-areas (C-1 and C-2). Excavation proceeded from 2000 to 2002 before stopping due to unanticipated site conditions. ROD Amendment #1 in 2007 recommended a combination of excavation and/or placement of fill to provide a soil cover to serve as a protective barrier between the ground surface and remaining contamination. LUCs are required for the soil, cover, and groundwater. The existing IRA groundwater extraction system was incorporated as the final remedy. A total of 21,450 cubic yards of soil was removed from sites C-1 and C-2 in 2008. Operation of the extraction system was suspended in 2008 due to declining contaminant concentrations. ESD #2 in 2009 clarified that LUCs are also required for soil at site C-1. The cleanup/exit strategy for the site is continued RA-O groundwater monitoring to verify that the containment system can remain off until cleanup levels are met. LUCs, cover maintenance, and Five-Year Reviews will continue.

3.3 Leach/Burn Pits (Site D) (TCAAP-06)

Site TCAAP-06, referred to as the Leach/Burn Pits (Site D), is a 1.8-acre site where sump wastes, scrap propellants, solvents, paint thinners, oils, rags, and chemicals were burned in pits from 1949 or 1950 to 1968. The site also received neutralized cyanide wastes. The COCs at TCAAP-06 are explosives, metals, PCBs, and VOCs.

Approximately 1,400 cubic yards of PCB-contaminated soil was excavated in 1985 and incinerated on-site in 1989. Residual PCB contamination is overlain by a soil cover. A clay cover was installed in 1985, and a soil vapor extraction (SVE) system was implemented as an IRA to address VOC-contaminated soil. The SVE system was declared part of the final remedial action in the 1997 OU2 ROD; the system removed 116,199 pounds of VOCs from 1986 to 1998 before it was shut down and dismantled. In 2001, additional shallow soils characterization was performed to assess metals and explosives contamination at the site. In 2002, approximately 1,381 cubic yards of soil were removed, which cleaned the soil to site-specific industrial levels. In 2009, OU2 ROD Amendment #3

documented the soil removal as part of the final remedy and added LUCs. Groundwater monitoring for VOCs is addressed under the OU2 Deep Groundwater site (TCAAP-19). The cleanup/exit strategy for TCAAP-06 is continued LUCs, cover maintenance, and Five-Year Reviews.

3.4 Dump and Burning Area (Site E) (TCAAP-07)

Site TCAAP-07, referred to as the Dump and Burning Area (Site E), is an 8.8-acre site that was used from the early-1940s to 1949 as a dump for both construction debris and trash, and as a burning ground for ammunition boxes and other materials, including large quantities of unknown chemicals. The COCs at TCAAP-07 are metals in the soil.

The 1997 OU2 ROD required excavation, stabilization, and off-site disposal of the contaminated soil. The site was cleaned up to site-specific industrial levels. Approximately 21,097 cubic yards of contaminated soil was removed. A soil cover was constructed over approximately 1.6 acres of the site, where asbestos-containing material remains in place. In 2009, OU2 ROD Amendment #3 documented the soil cover as part of the final remedy and added LUCs. The cleanup/exit strategy at TCAAP-07 is continued LUCs, cover maintenance, and Five-Year Reviews.

3.5 Dump (Site G) (TCAAP-09)

Site TCAAP-09, referred to as the Dump (Site G), is a 4.6-acre site that was used as a general dump area for the disposal of rubble, asphalt pavement, barrels, oil filters, rocket propellant research materials, floor-absorbent sweepings, metal dusts and grindings, burning operation ashes, and scrap roofing debris. Operations at the site appear to have begun during World War II and continued through 1976. The COCs at TCAAP-09 are VOCs in the soil and groundwater.

In 1985, a clay cover was installed at the site. In 1986, an SVE system was implemented as an IRA to address VOC-contaminated soil; the system was declared part of the final remedial action in the 1997 OU2 ROD. From 1986 to 1998, the system removed 104,418 pounds of VOCs, at which time it was shut down and dismantled. Additional characterization was completed for the general dump. In 2003, an approximate 4.4-acre cover was completed. In 2009, OU2 ROD Amendment #3 documented revised cleanup levels and the soil cover and added LUCs to the final remedy. An OU2 Land Use Control Remedial Design (LUCRD) was approved in 2010 that documented the LUCs for

the site. No further action is required for VOC-contaminated soil beyond maintenance of the cover. Groundwater monitoring for VOCs is addressed as part of OU2 Deep Groundwater Site TCAAP-19. The cleanup/exit strategy for TCAAP-09 is continued LUCs, cover maintenance, and Five-Year Reviews.

3.6 Burn/Burial Area (Site H) (TCAAP-10)

Site TCAAP-10, referred to as the Burn/Burial Area (Site H), is a 11.7-acre site that operated as a burning site with a burning cage located in the center from the early-1940s until the late-1960s. In addition to waste burning, portions of the site may have been used to bury and dump industrial sludge, paint residue, incineration ash, and solvents. The COCs at TCAAP-10 are metals in the soil.

The 1997 OU2 ROD required excavation, stabilization, and off-site disposal of the contaminated soil. The site was cleaned up to site-specific industrial levels. Approximately 8,615 cubic yards of contaminated soil was removed. A soil cover was constructed over approximately 2.9 acres of the site, where asbestos-containing material remains in place. In 2009, OU2 ROD Amendment #3 documented the soil cover as part of the final remedy and added LUCs. The cleanup/exit strategy at TCAAP-10 is continued LUCs, cover maintenance, and Five-Year Reviews.

3.7 Leaching Pits (Site 129-3) (TCAAP-11)

Site TCAAP-11, referred to as Leaching Pits (Site 129-3), is a two-acre site that had three leaching pits used for the disposal and flashing of contaminated wastewater. The wastewater primarily came from a lead styphnate primer mix facility that began operation in 1971 and ended in about 1972. Disposal activities at the site may also have included burning scrap powder and lead styphnate wastes. The COCs at TCAAP-11 are explosives, metals, and VOCs in the soil.

The 1997 OU2 ROD required excavation, stabilization, and off-site disposal of the contaminated soil. The site was cleaned up to site-specific industrial levels. Approximately 3,460 cubic yards of contaminated soil was removed. In 2009, OU2 ESD #2 added LUCs to the site. The cleanup/exit strategy at TCAAP-11 is continued LUCs and Five-Year Reviews.

3.8 Burn/Disposal Area (Site 129-5) (TCAAP-12)

Site TCAAP-12, referred to as Burn/Disposal Area (Site 129-5), is a 7.2-acre site that was used from about 1945 or 1946 through the late-1950s for the open burning of scrap explosives, bullets, spent solvents, and disposal of primer/tracer sludge. The areas of the site with observed surface debris were fenced in 1995. The COCs for TCAAP-12 are metals in the soil.

The 1997 OU2 ROD required excavation, stabilization, and off-site disposal of the contaminated soil. The site was cleaned up to site-specific industrial levels. Approximately 100 cubic yards of contaminated soil was removed. In 2009, OU2 ESD #2 added LUCs to the site. The cleanup/exit strategy at TCAAP-12 is continued LUCs and Five-Year Reviews.

3.9 Dump (Site 129-15) (TCAAP-13)

Site TCAAP-13, referred to as Dump (Site 129-15), is an approximately two-acre site that was used as a landfill for construction debris from 1970 through 1978. In 1994, PAHs were discovered during preliminary characterization of dump material. The COCs at TCAAP-13 are metals and PAHs in the soil.

The 1997 OU2 ROD required characterization to determine the course of action for the dump, during which lead was also identified as a COC. A soil cover was selected as the remedy for the dump, and construction of the cover was completed in 2001. The site was cleaned up to site-specific industrial levels. Approximately 100 cubic yards of contaminated soil was removed. In 2009, OU2 ROD Amendment #3 documented the soil cover as part of the final remedy and added LUCs as a requirement. The cleanup/exit strategy at TCAAP-13 is continued LUCs, cover maintenance, and Five-Year Reviews.

3.10 Building 502 and Area (Site I) (TCAAP-15)

Site TCAAP-15, referred to as Building 502 and Area (Site I), is an approximately 43-acre site that consists of Building 502 and its associated structures and facilities. Building 502 was constructed in 1942 and was used until 2004 for the production of various ammunition, projectiles, and artillery ammunition components. In 1958, Honeywell Defense Systems assumed responsibility for general

manufacturing activities at the building. The COCs at TCAAP-15 are PCBs and VOCs in the soil and groundwater.

In the mid-1980s, an IRA was completed that excavated approximately 5,619 cubic yards of PCB-contaminated soil and concrete from around the building where it was stored onsite before disposal at an off-site facility in 1998. In accordance with the 1997 OU2 ROD, additional characterization of Unit 1 and 2 soil and groundwater was completed in 1999. A 2001 engineering study indicated that the ROD requirement for extraction of shallow groundwater is not feasible at the site. In 2009, OU2 ROD Amendment #2 deleted the groundwater extraction requirement and added LUCs. Shallow soils have been remediated by Ramsey County. Groundwater monitoring will continue until site-specific cleanup levels have been met. The cleanup/exit strategy at TCAAP-15 is continued LUCs and Five-Year Reviews. The land has been transferred and will be redeveloped.

3.11 Building 103 (Site K) (TCAAP-16)

Site TCAAP-16, referred to as Building 103 (Site K), is an approximately 21-acre site that consists of Building 103, a two-story structure built in 1943. The building was used for manufacturing and assembly operations, and various solvents were used to clean machines, parts, and floors. In 1961, the operations were reactivated for the production of fuses, mines, and weapon systems. Building 103 was demolished in 2006, but the concrete slab remains in place. The COCs at TCAAP-16 are VOCs in the soil and groundwater.

In 1985, a pump-and-treat system was implemented as an IRA to remove chlorinated solvents from shallow groundwater. The system was designated as part of the final remedial action in the 1997 OU2 ROD. The ROD also required further investigation of the shallow soils, which was completed in 2000. Soil remediation was not feasible because soils were beneath an existing building. After the building was removed in 2006, approximately 69 tons of contaminated soil and rubble were removed. The soil removal achieved unrestricted use levels, so there are no LUC requirements for soil. In 2009, OU2 ESD #1 added groundwater LUCs to the site. In 2012, OU2 Amendment #4 declared the removal action as the final remedy, with NFA for the soil area. The groundwater pump-and-treat system will continue until site-specific levels are met. The cleanup/exit strategy at TCAAP-16 is continued LUCs and Five-Year Reviews. The land has been transferred and will be redeveloped.

3.12 OU1 Deep Groundwater (TCAAP-17)

Past industrial activities at TCAAP resulted in groundwater contamination of deep aquifers (Units 3 and 4). Off-post, the groundwater contamination plumes diverge into two plumes termed the north plume (TCAAP-17) and south plume (TCAAP-27). OU1 addresses the north plume. The COCs at TCAAP-17 are VOCs in the groundwater.

In June 1990, a permanent GAC treatment facility was installed in New Brighton to treat contaminated municipal wells. The treatment plant supplies drinking water to area residents and aids in the remediation of the TCAAP-related contaminated groundwater plume. A ROD was signed for OU1 in 1993 and required additional extraction wells for containment of the plume. Construction was completed in 1998. The ROD also required alternate water supply/well abandonment, well advisory, monitoring, and reporting. In 2006, a ROD amendment was issued for OU1, which replaced the requirement for containment with a requirement to demonstrate aquifer restoration. An emerging COC, 1,4-dioxane, resulted in the suspension of pumping (a "remedy time-out") to evaluate treatment options and modify the treatment facility. Additional monitoring is being conducted to evaluate impacts to the remedy. The cleanup/exit strategy for TCAAP-17 is continued LTM until site-specific levels are met.

3.13 OU2 Deep Groundwater (TCAAP-19)

Past industrial activities at TCAAP resulted in groundwater contamination of deep aquifers (Units 3 and 4). Site TCAAP-19 addresses deep groundwater contamination within the original TCAAP boundary (OU2). The COCs at TCAAP-19 are VOCs in the groundwater.

In 1986, the TCAAP groundwater recovery system (TGRS) began operation. The system included 12 extraction wells to capture contamination migrating off-post along the southwest boundary and five source control wells near known contamination sources. Water is treated through air strippers and recharged via a gravel pit. The system was designated as part of the final remedial action in the 1997 OU2 ROD. In 2003, a TGRS operating strategy resulting from a reconfiguration analysis to optimize mass removal was approved by regulators. In 2009, ESD #1 clarified LUC requirements for groundwater. The emerging contaminant 1,4 dioxane is present in OU2 groundwater, as in OU1

groundwater, and is being addressed through an ESD that is currently underway. The cleanup/exit strategy for TCAAP-19 is continued operation of the TGRS until site-specific levels are met. LUC implementation and Five-Year Reviews will continue.

3.14 Grenade Range (TCAAP-20)

Site TCAAP-20, referred to as the Grenade Range, is an approximately 19-acre site. The range consisted of two launching structures and three landing pads from March 1967 until July 1975. The COCs at TCAAP-20 are metals in the soil.

Based on a 1999 Engineering Evaluation/Cost Analysis (EE/CA) and action memorandum, a removal action was conducted that consisted of excavation, stabilization, and off-site disposal of contaminated soil. The site was cleaned up to site-specific industrial levels. Approximately 2,179 cubic yards of contaminated soil were removed. In 2009, OU2 ROD Amendment #3 documented soil removal as the final remedy and added LUCs. The cleanup/exit strategy at TCAAP-20 is continued LUCs and Five-Year Reviews.

3.15 Outdoor Firing Range (TCAAP-21)

Site TCAAP-21, referred to as the Outdoor Firing Range, is an approximately 150-acre site. The range consisted of three bullet catchers that were used to test ammunition from the 1950s through the 1970s. The COCs at TCAAP-21 are metals and PAHs in the soil.

Based on a 1999 EE/CA, a removal action was conducted that consisted of excavation, stabilization, and off-site disposal of contaminated soil. The site was cleaned up to site-specific industrial levels. Approximately 990 cubic yards of contaminated soil were removed. Near one of the range backstops, PAH-contaminated soil was found. A cover was initially constructed in 2003, with additional cover material placed in 2004. In 2009, OU2 ROD Amendment #3 documented soil removal and soil cover as the final remedy and added LUCs. The cleanup/exit strategy at TCAAP-21 is continued LUCs, cover maintenance, and Five-Year Reviews.

3.16 Building 135 Primer/Tracer Area (TCAAP-23)

Site TCAAP-23, referred to as Building 135 Primer/Tracer Area, is an approximately 65-acre site that consists of Building 135 and associated structures and utilities dedicated to the manufacture of small caliber ammunition primer and tracer mixtures. The manufacturing period included all of TCAAP production. The COCs at TCAAP-23 are PAHs in the soil.

In 1996, limited soil sampling was performed to obtain a relative risk site evaluation score. In 2001, a PA recommended an SI be performed. The SI report recommended that an EE/CA be performed to better delineate the extent and magnitude of contamination and to evaluate the appropriate response action. In 2005, approximately 1,256 tons of contaminated sediments were excavated and landfilled offsite, achieving unrestricted use cleanup levels. In 2009, OU2 ROD Amendment #3 documented the removal as a final remedy with NFA required. The western portion of 135 PTA is intended for transfer to Ramsey County for recreational use. An EE/CA and action memorandum was completed on the remaining (eastern) portion in 2012, with soil removal as the selected remedy. The 2014 OU2 ROD Amendment #5 documented the previously completed soil removal action and selected LUCs as the remedy. The cleanup/exit strategy for TCAAP-23 is continued LUCs and Five-Year Reviews. Oversight will be provided to Ramsey County during the investigation and remediation work on the parcel it intends to acquire.

3.17 OU3 Deep Groundwater (TCAAP-27)

Past industrial activities at TCAAP resulted in groundwater contamination of deep aquifers (Units 3 and 4). Off-post, the groundwater contamination plumes diverge into two plumes termed the north plume (TCAAP-17) and south plume (TCAAP-27). OU3 addresses the south plume. The COCs at TCAAP-27 are VOCs in the groundwater.

The 1992 OU3 ROD required construction of an extraction well to hydraulically contain the south plume. The water was treated by GAC and then discharged to the New Brighton municipal water system. The system was known as the Plume Groundwater Recovery System (PGRS). Beginning in late-1998, levels of contamination were below action levels at the containment boundary. In 2001, pumping for remediation purposes was temporarily stopped; regulators required the system to remain

in standby until December 2004. A ROD Amendment was signed in Fiscal Year (FY) 2006 that documented that the PGRS was no longer needed and replaced it with MNA with LUCs. The cleanup/exit strategy for TCAAP-27 is continued MNA, LUCs, and Five-Year Reviews until cleanup levels are achieved.

3.18 Building 102 Degreasing Operations (TCAAP-30)

Site TCAAP-30, referred to as Building 102 Degreasing Operations, consisted of the former Building 102 that was constructed in 1942 and used periodically until the mid-1970s for the production of small caliber ammunition and other munitions components. Historical records indicate that portable degreasing machines were used in Building 102 during the early-1950s to reactivate production equipment for the Korean crisis. The COCs at TCAAP-30 are VOCs in the groundwater.

Phase I and Phase II environmental site assessments conducted between 2002 and 2004 found contamination emanating from beneath Building 102. A groundwater investigation report recommended that an EE/CA be performed to better delineate the extent and magnitude of contamination. The 2008 EE/CA and action memorandum selected MNA as the remedy. In 2012, OU2 ROD Amendment #4 declared MNA as the final remedy with LUCs. The cleanup/exit strategy at TCAAP-30 is continued MNA, LUCs, and Five-Year Reviews until site-specific cleanup goals are achieved. The land has been transferred and will be redeveloped.

3.19 Round Lake (TCAAP-31)

Site TCAAP-31, referred to as Round Lake, is located southwest of TCAAP. The lake and surrounding shoreline were controlled by the Army from the early-1940s until 1974, when control was transferred to U.S. Fish and Wildlife Service (USFWS). The lake accepts stormwater runoff from a nearby road and a portion of TCAAP. There was periodic discharge of industrial waste from TCAAP until circa 1969. No public activity is allowed by USFWS on Round Lake, and it is currently part of the Minnesota Valley National Wildlife Refuge. The COCs at TCAAP-31 are metals in the sediment.

Limited environmental investigations began in the early-1980s. The first relatively extensive investigation of surface water and sediment was conducted in 1992; this data was used as the

foundation for additional phased investigation work in support of an ecological risk assessment. The Tier I Screening Risk Assessment was approved in 1997 and the Tier II Ecological Risk Assessment was approved in 2004. Metals in sediment were identified as the primary risk concern. An FS was agreed to be conducted for Round Lake. Draft revisions of the FS have undergone regulatory review in 2005, 2009, 2010, and 2012. Additional sediment testing was completed in 2011. A supplemental Ecological Risk Assessment was completed in 2013. The Draft Final RI/FS is currently in review and has been in an informal dispute. Dispute resolution is underway. The cleanup/exit strategy will be determined by the FS and selected remedy.

Table 1. TCAAP Active IRP Sites and Schedule

SITE ID	SITE NAME	PHASE	FY19	FY20	FY21	FY22	FY23+
TCAAP-01	Burial/Burn Area (Site A)	RA(O)					
TCAAP-05	Open Burn/Disposal Area (Site C)	RA(O)					
TCAAP-06	Leach/Burn Pits (Site D0	LTM					
TCAAP-07	Dump and Burning Area (Site E)	LTM					
TCAAP-09	Dump (Site G)	LTM					
TCAAP-10	Burn/Burial Area (Site H)	LTM					
TCAAP-11	Leaching Pits (Site 129-3)	LTM					
TCAAP-12	Burn/Disposal Area (Site 129-5)	LTM					
TCAAP-13	Dump (Site 129-15)	LTM					
TCAAP-15	Bldg. 502 and Area (Site I)	RA(O)					
TCAAP-16	Bldg. 103 (Site K)	RA(O)					
TCAAP-17	OU1 Deep Groundwater	RA(O)					
		LTM					
TCAAP-19	OU2 Deep Groundwater	RA(O)					
		LTM					
TCAAP-20	Grenade Range	LTM					
TCAAP-21	Outdoor Firing Range	LTM					
TCAAP-23	Bldg. 135 Primer/Tracer Area	LTM					
TCAAP-27	OU3 Deep Groundwater	RA(O)					
		LTM					
TCAAP-30	Bldg. 102 Degreasing Operations	RA(O)					
TCAAP-31	Round Lake	RI/FS					
		IRA					
		LTM					

phase underway

3.20 Environmental Baseline Survey AOCs (CCTCAAP-32)

Site CCTCAAP-32, referred to as the Environmental Baseline Survey (EBS) AOCs, consists of two AOCs that were identified during EBS work performed between 1996 and 2005. The COCs at CCTCAAP-32 are metals in the soil.

An EE/CA and action memorandum were completed in 2012. The selected remedy was soil removal, which was completed in 2013 when 1,120 cubic yards of soil was removed and disposed. The ROD Amendment was signed in 2014. The cleanup/exit strategy for CCTCAAP-32 is continued LUCs and Five-Year Reviews.

Table 2. TCAAP Active CRP Site and Schedule

SITE ID	SITE NAME	PHASE	FY19	FY20	FY21	FY22	FY23+
CCTCAAP-01	Environmental Baseline Survey AOCs	LTM					

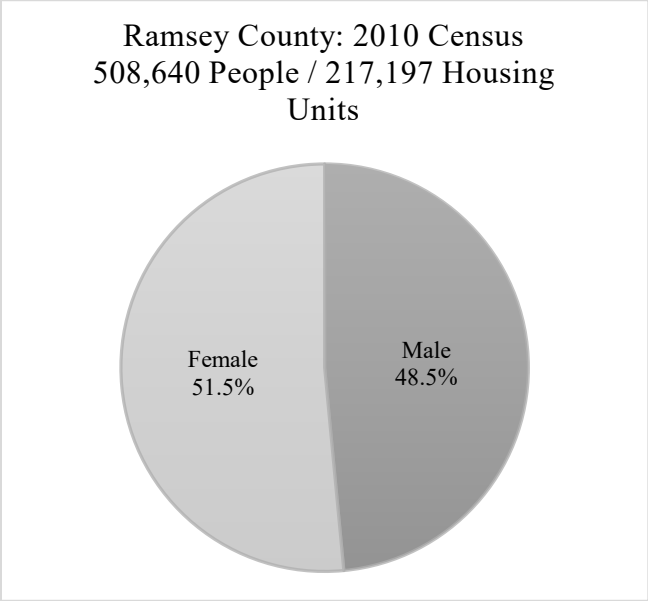
phase underway

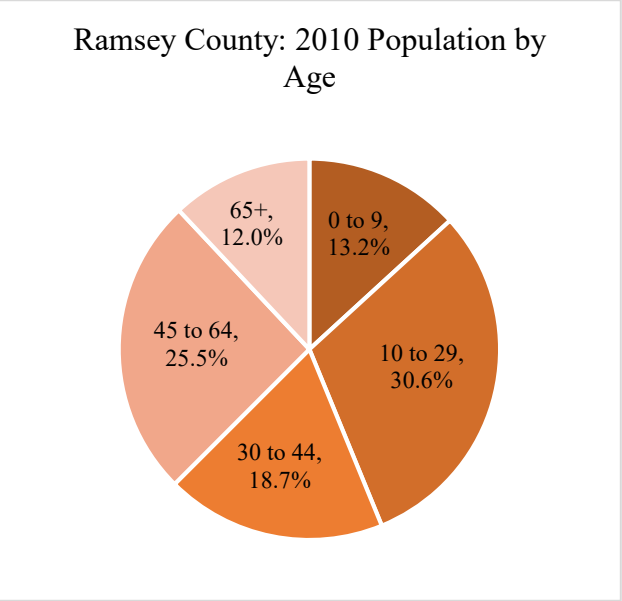
4.0 COMMUNITY PROFILE

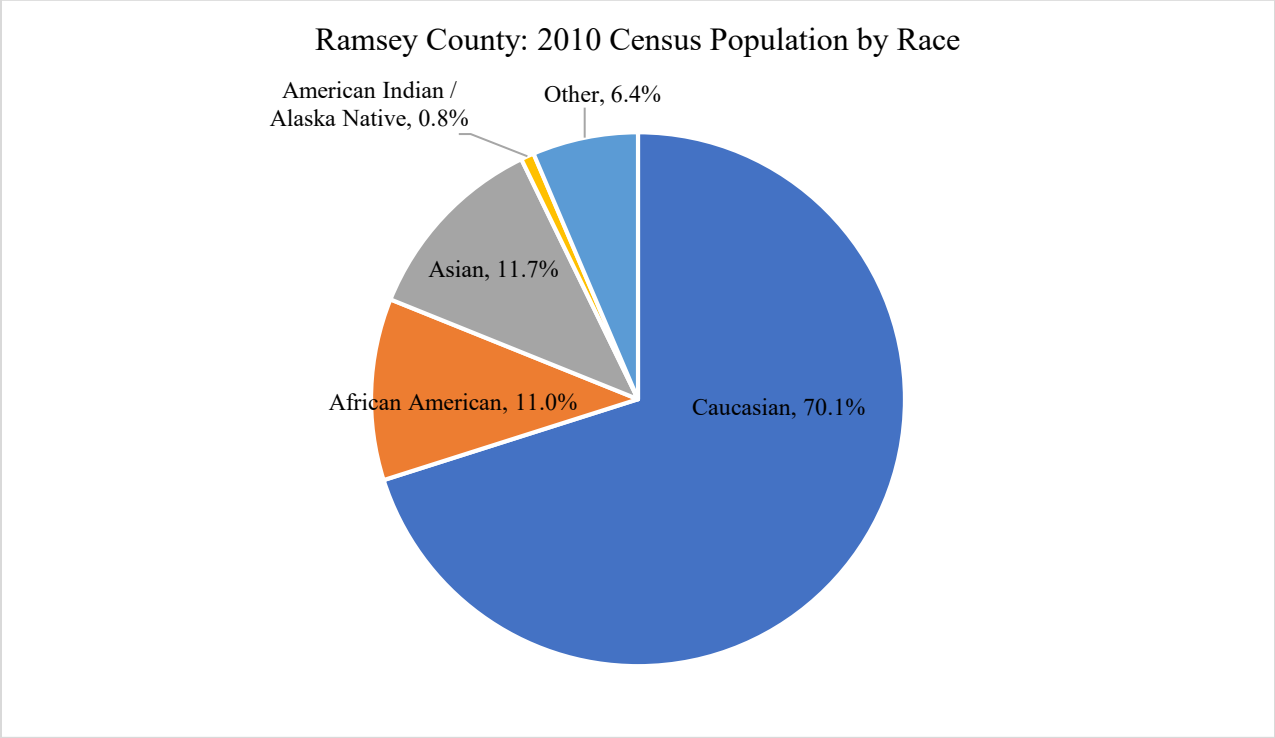
The following subsections present an overview of the surrounding community and a general chronology of community participation and communications to date, as well as the results of the community interviews conducted for this CIP.

4.1 Ramsey County

Ramsey County is located in the Minneapolis-Saint Paul metropolitan area of Minnesota. When TCAAP was placed on the NPL in 1983, it occupied approximately 2,370 acres in northwest Ramsey County.

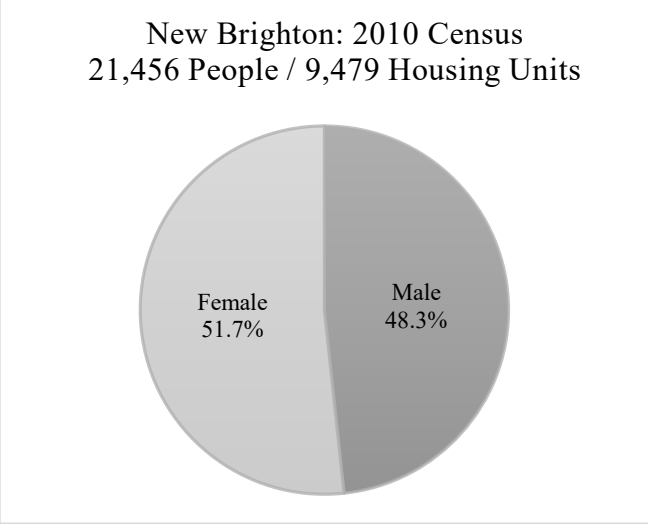


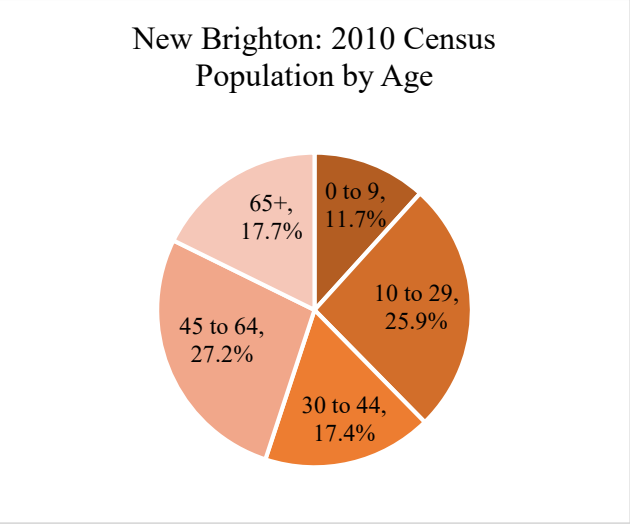


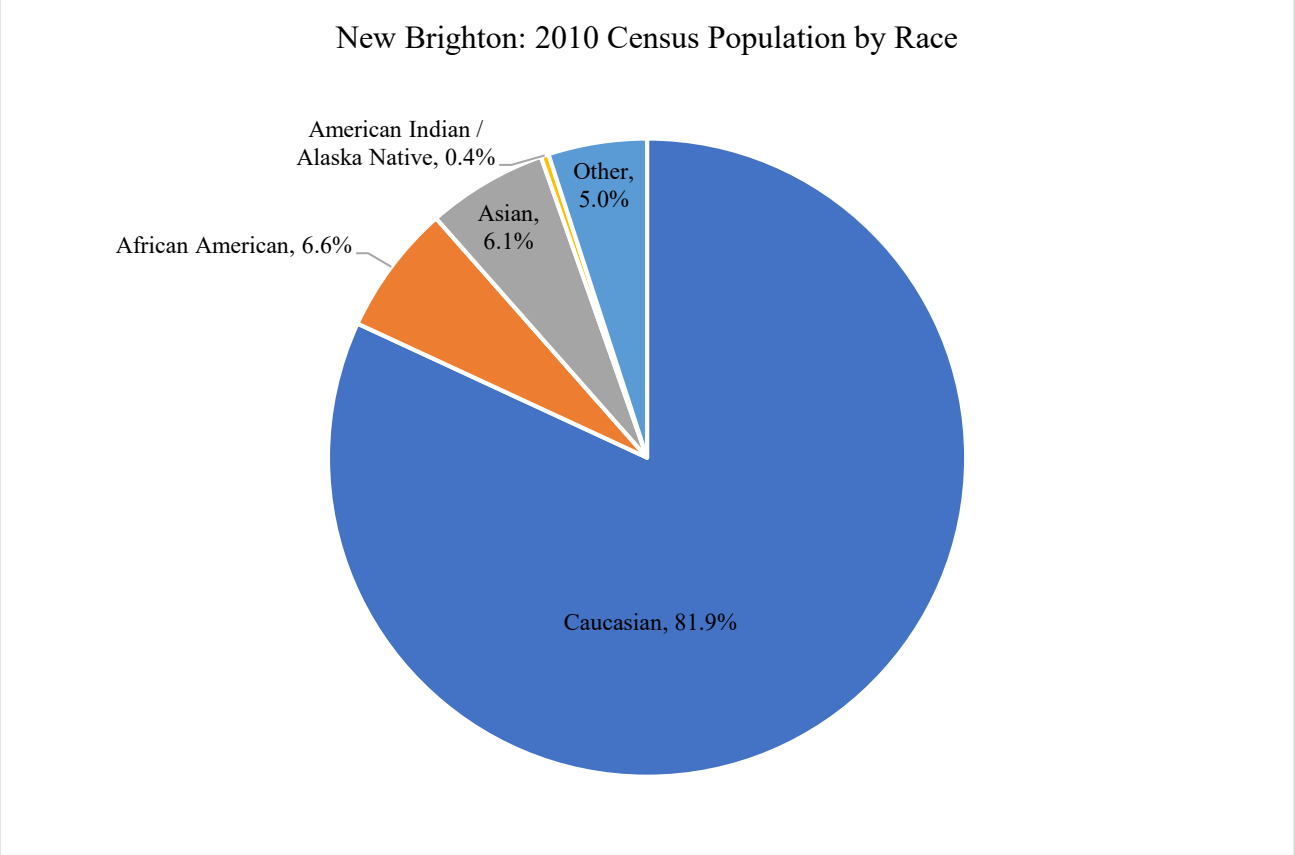


4.1.1 New Brighton

The city of New Brighton is located between St. Paul and Minneapolis within Ramsey County. The former TCAAP is located to the northeast of New Brighton.

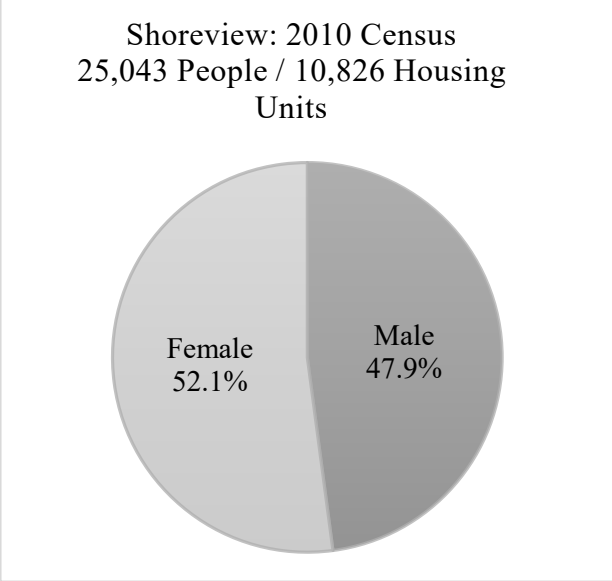


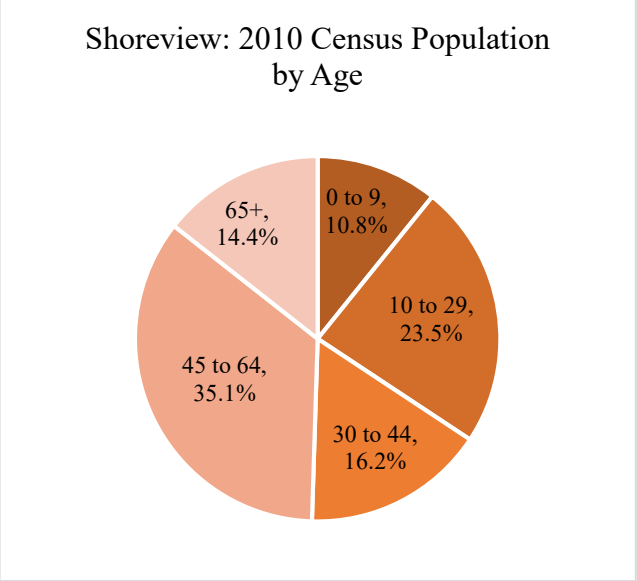


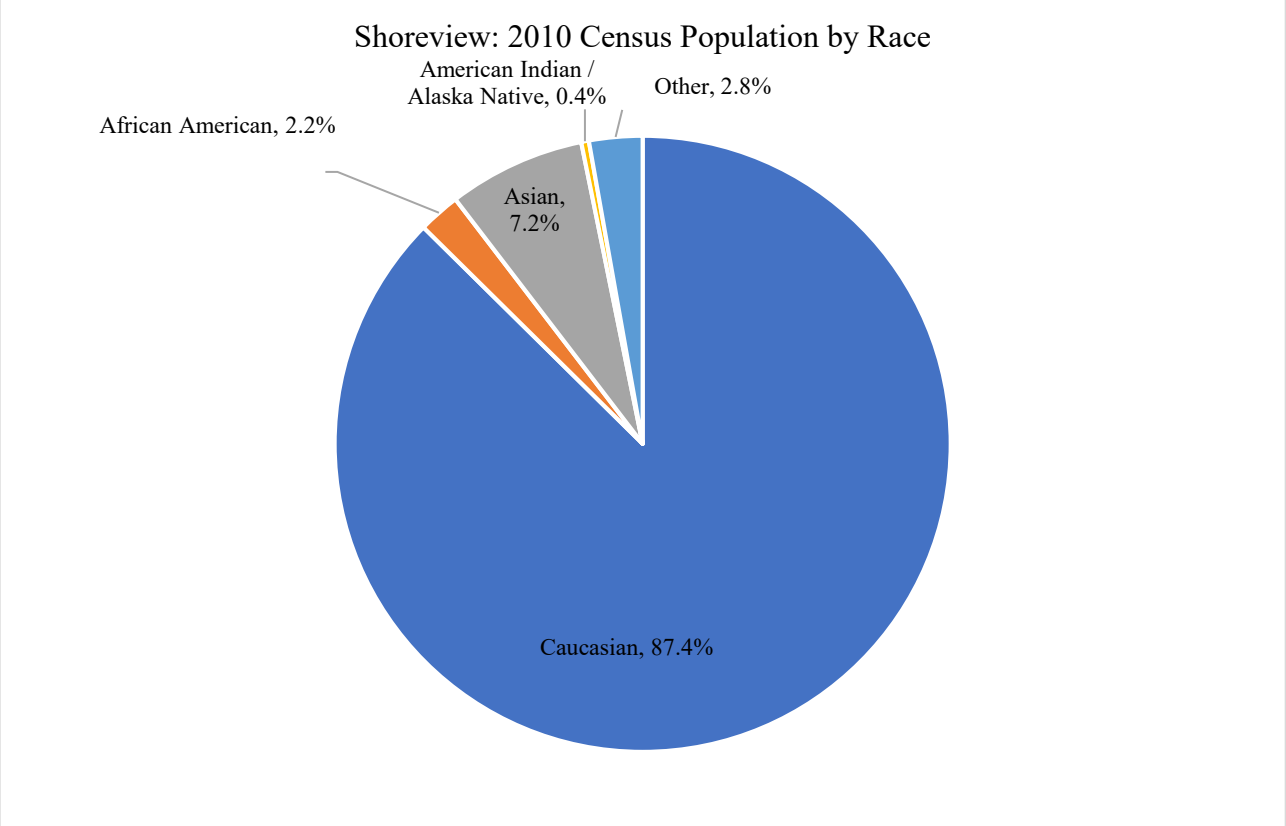


4.1.2 Shoreview

The city of Shoreview is located within Ramsey County, directly north and east of the former TCAAP.

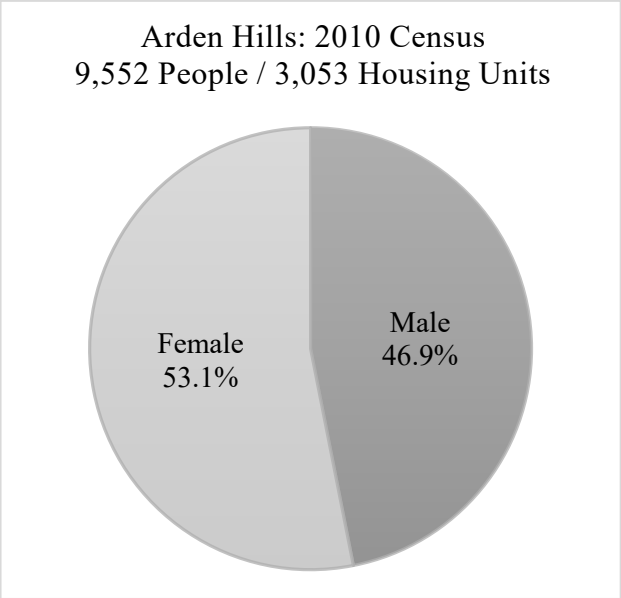


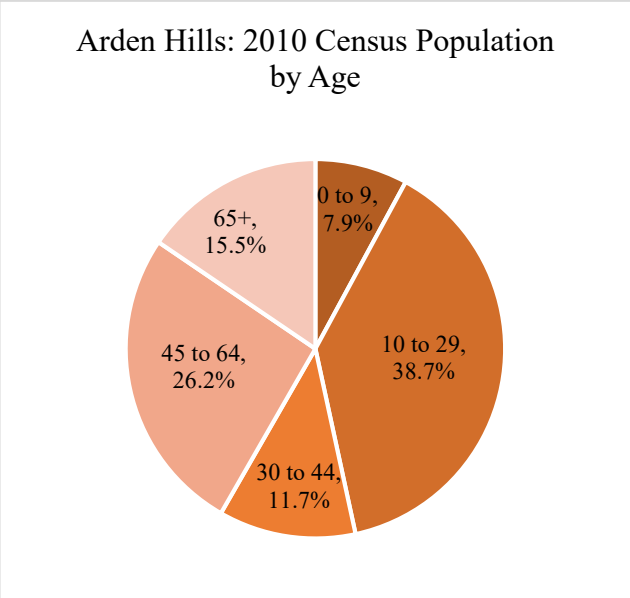


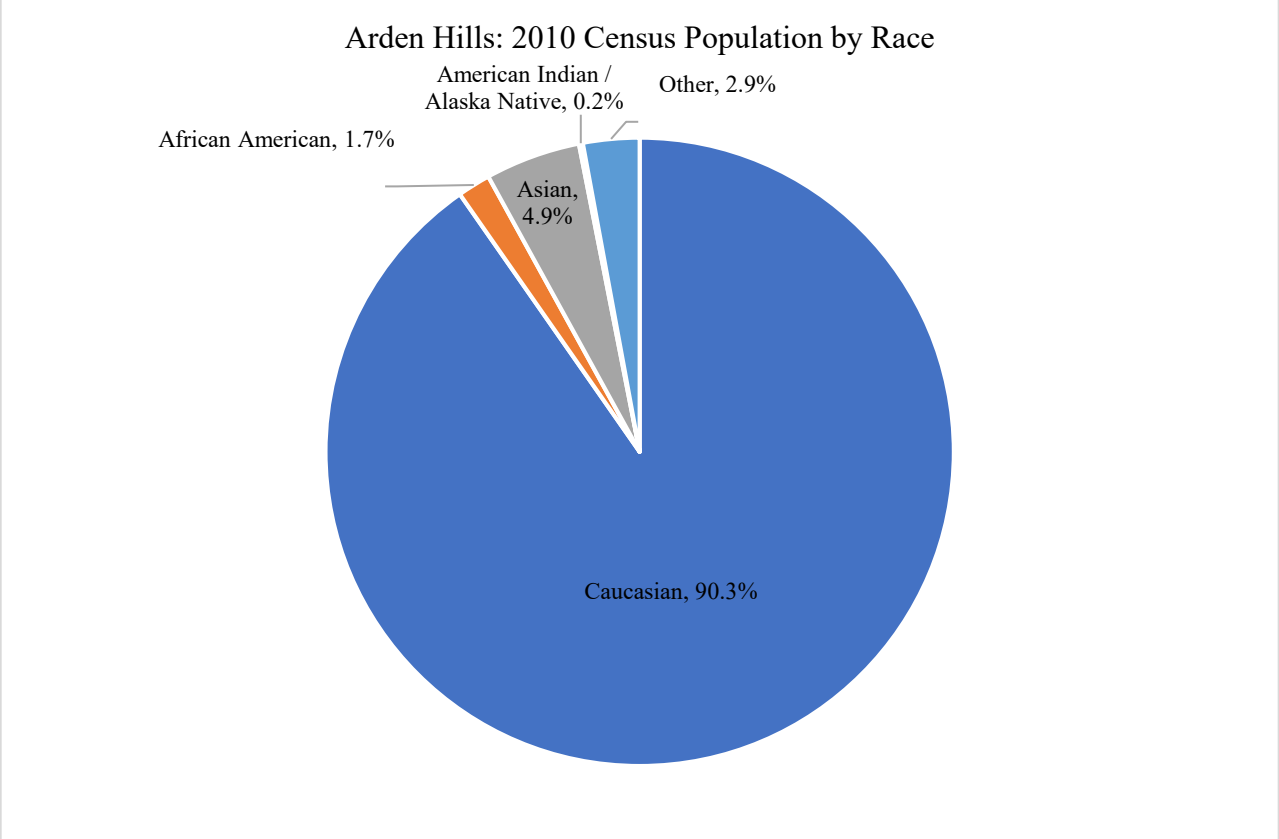


4.1.3 Arden Hills

The city of Arden Hills is located within Ramsey County, south of the former TCAAP.

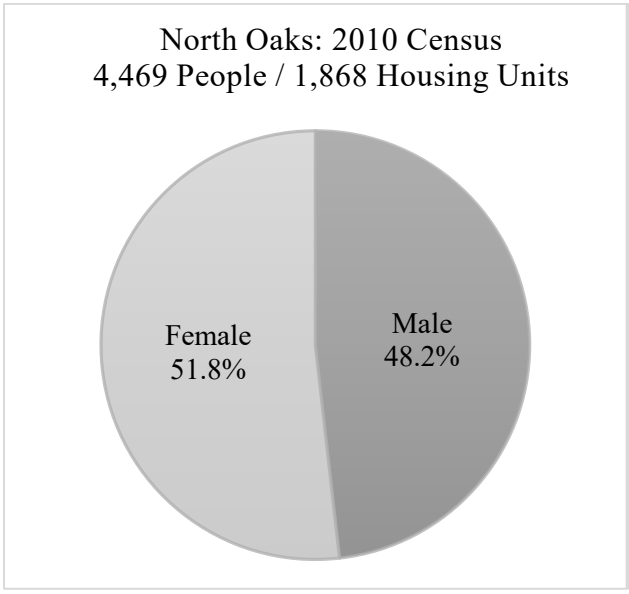


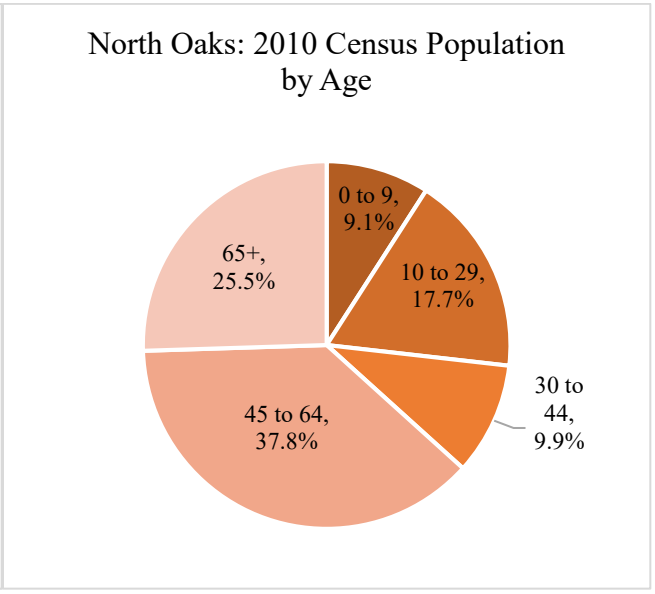


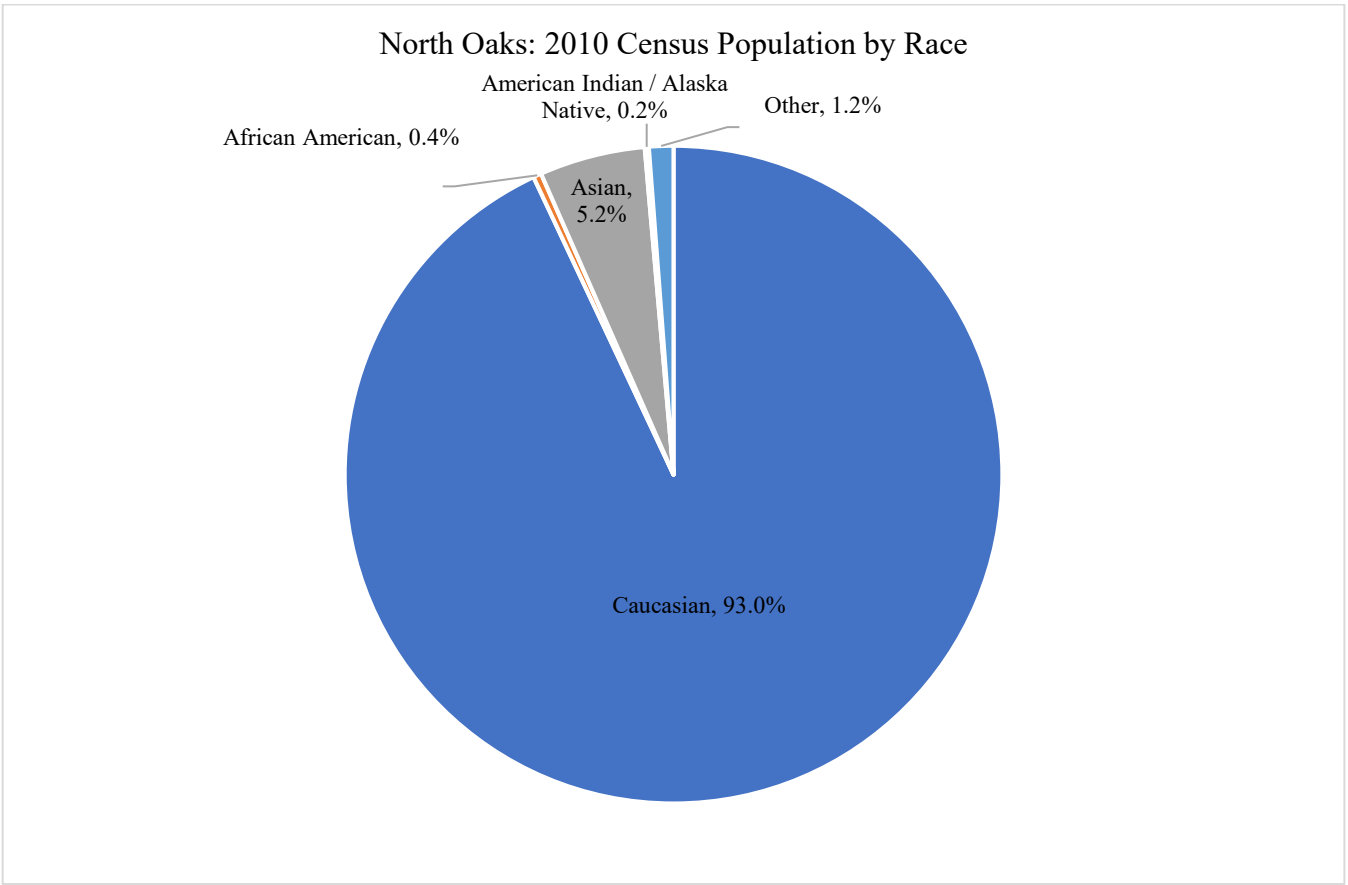


4.1.4 North Oaks

The city of North Oaks is located within Ramsey County, east of the former TCAAP.

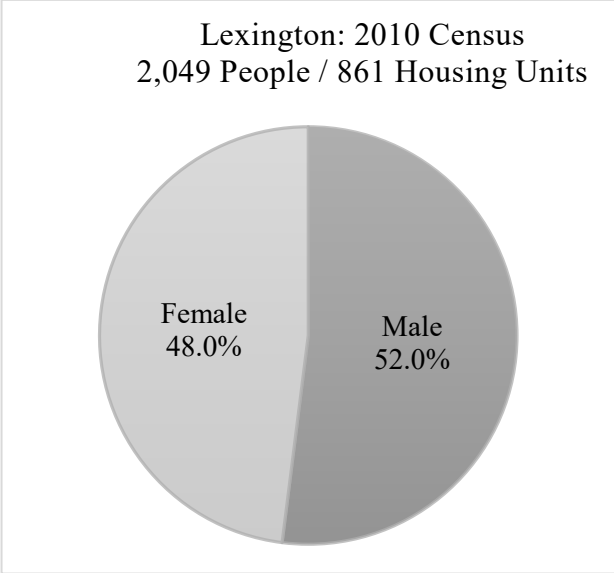


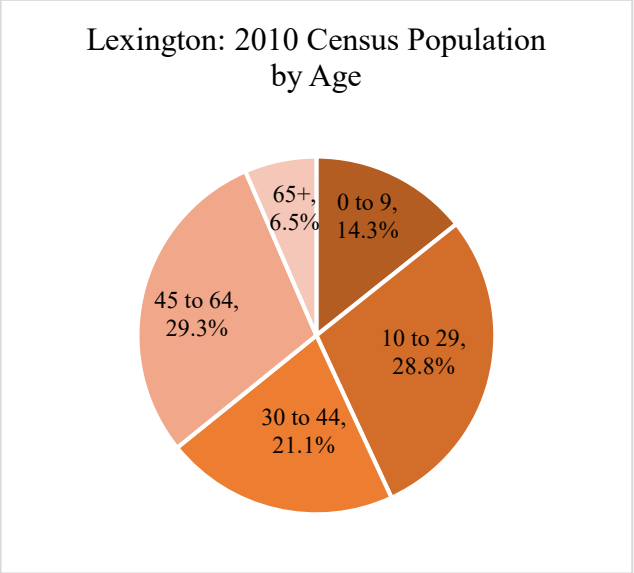


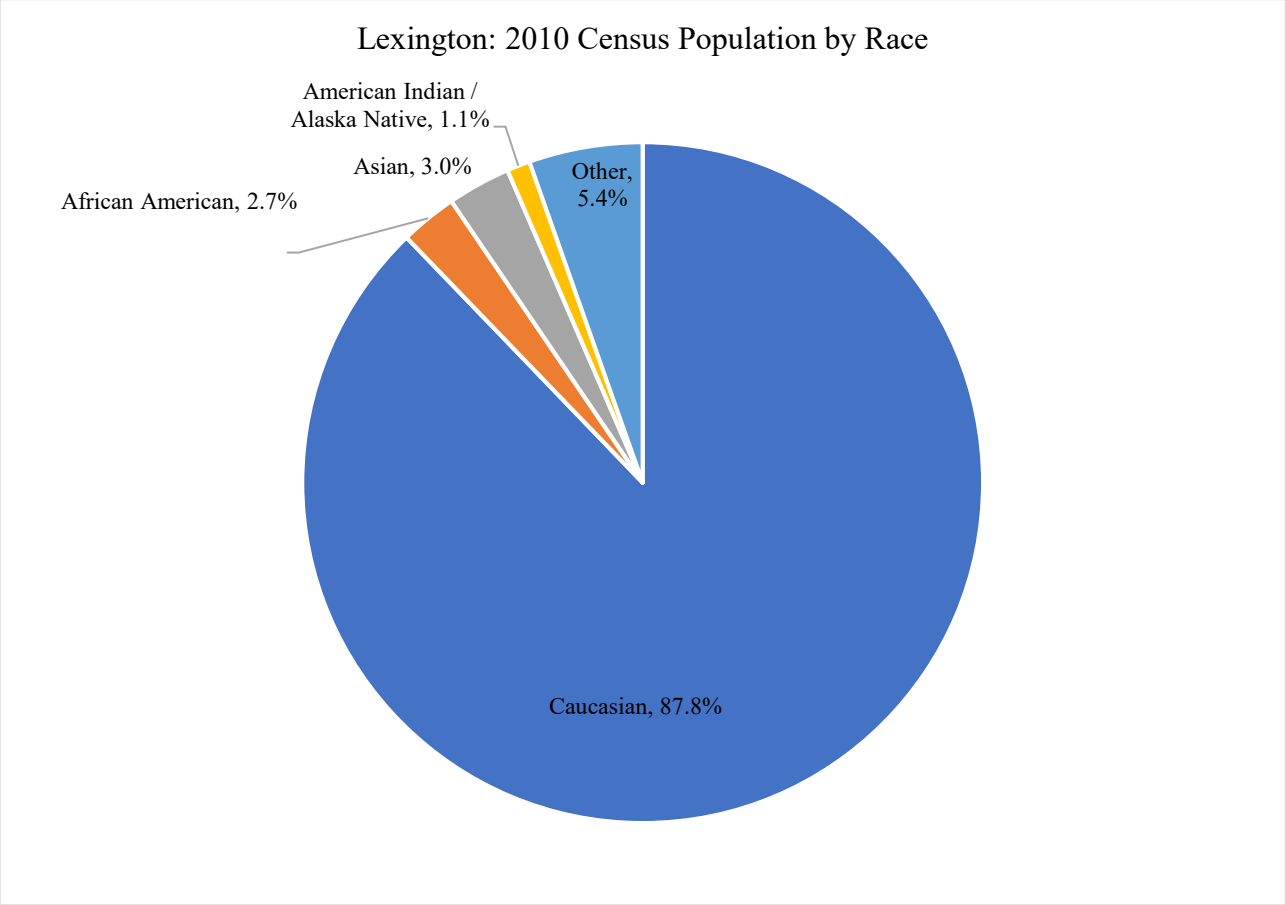


4.1.5 Lexington

Lexington is located within Ramsey County, north of the former TCAAP.

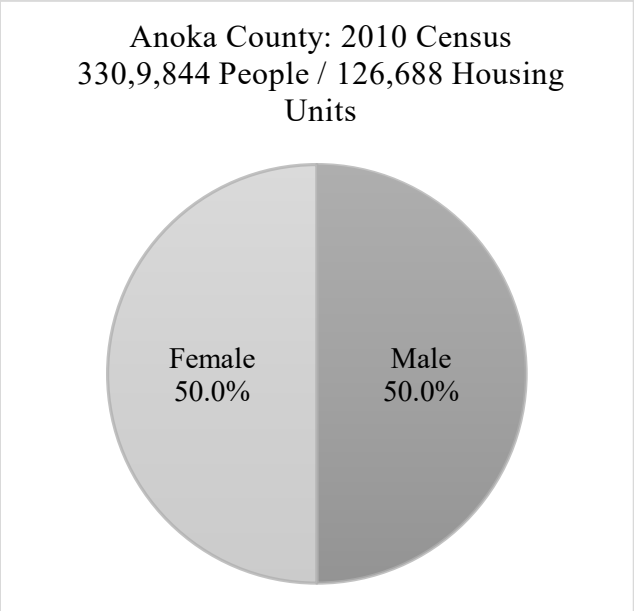


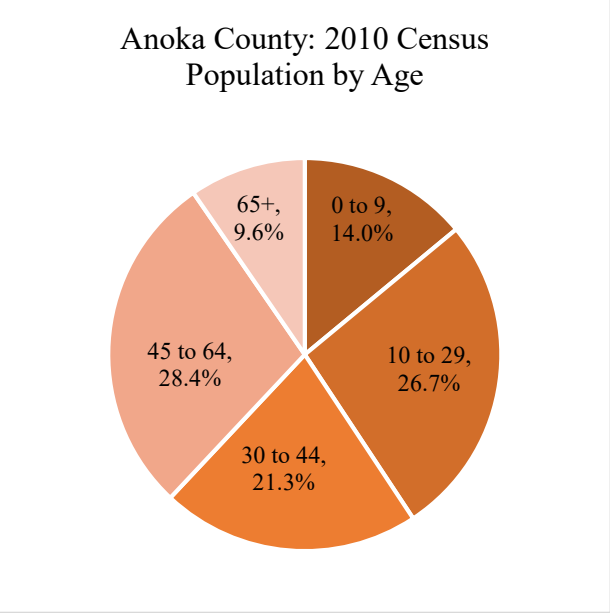


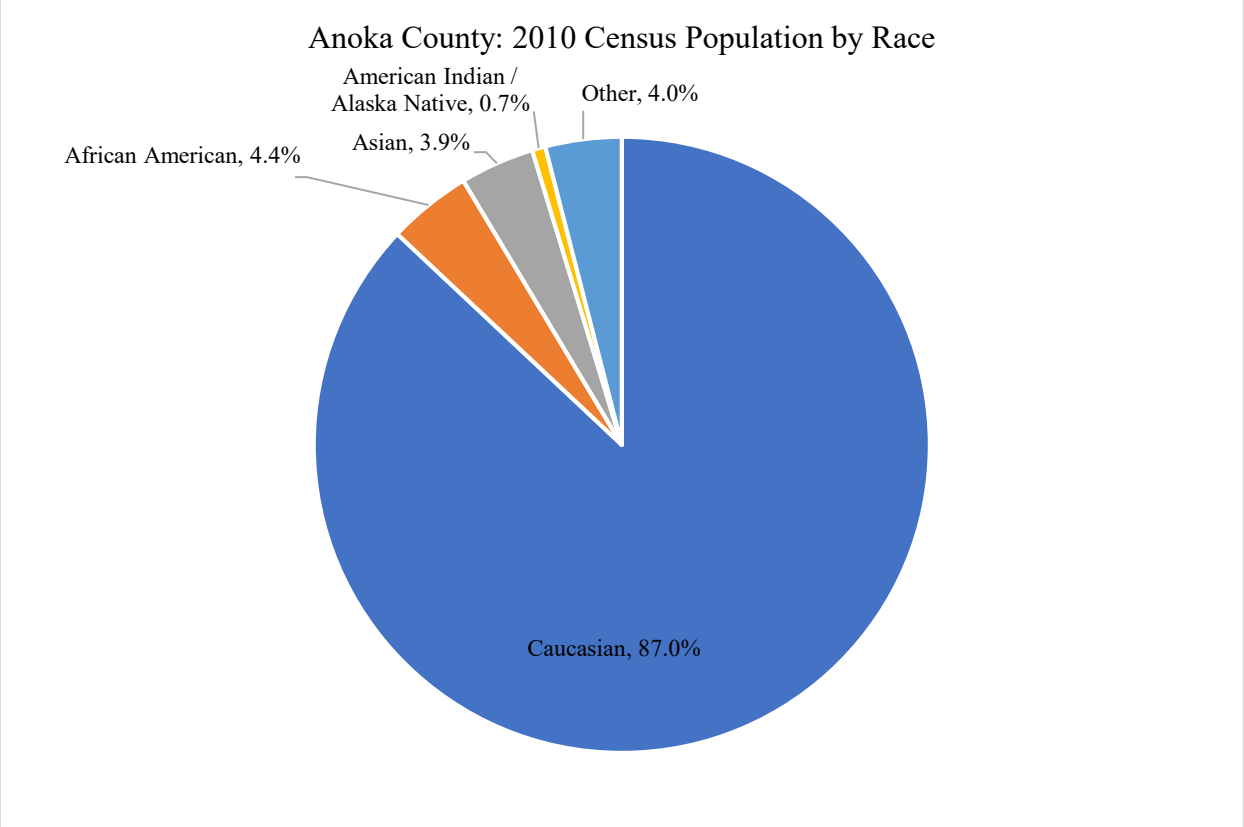


4.2 Anoka County

Anoka County is located north of Ramsey County, to the north of the former TCAAP.

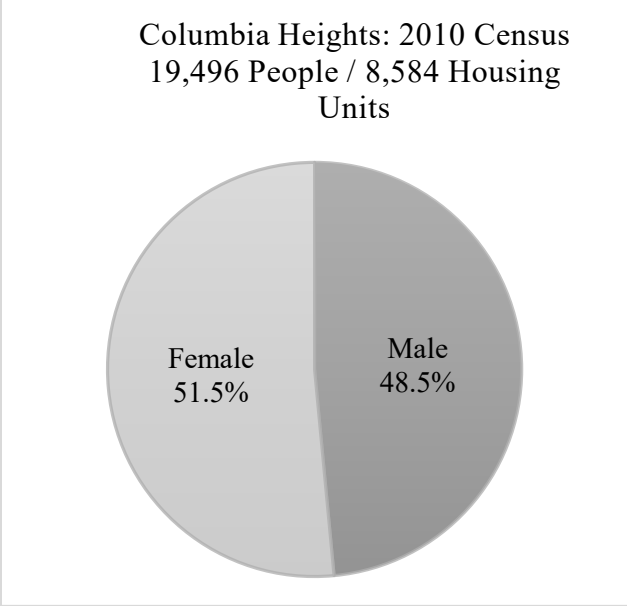


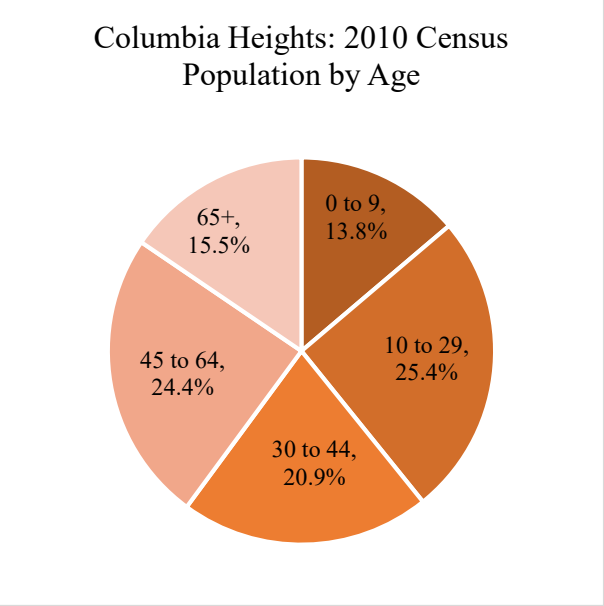


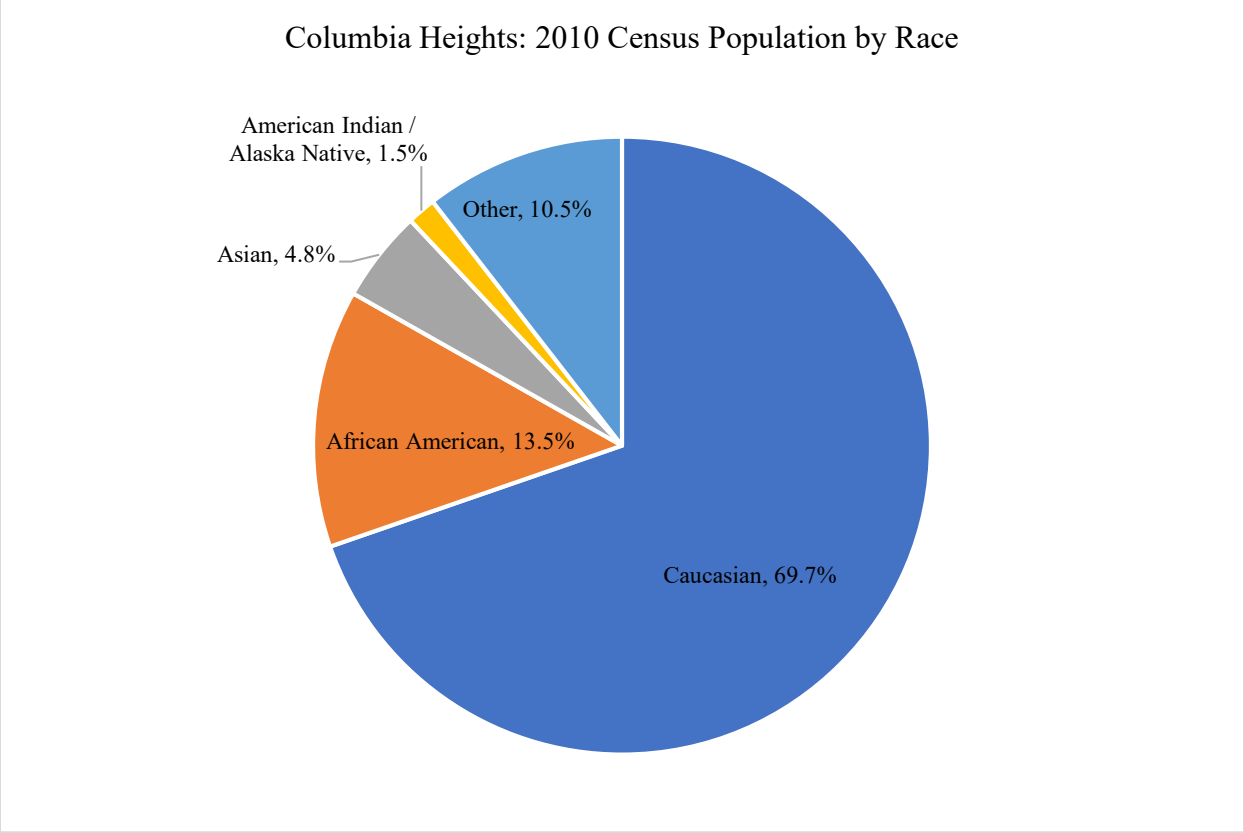


4.2.1 Columbia Heights

The city of Columbia Heights is located in Anoka County, southwest of the former TCAAP.

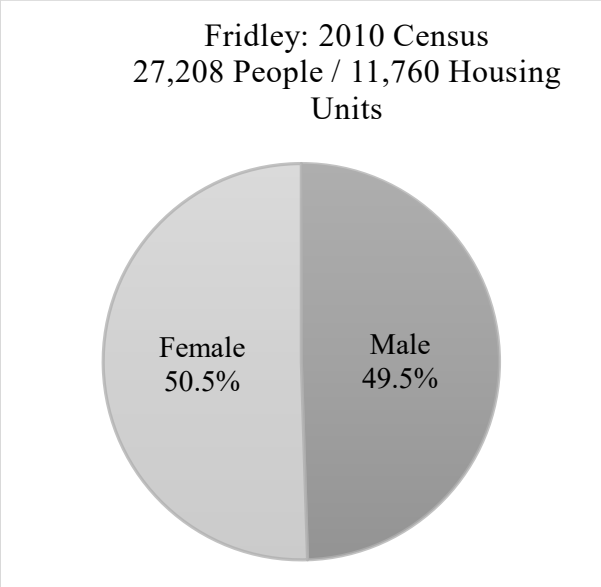


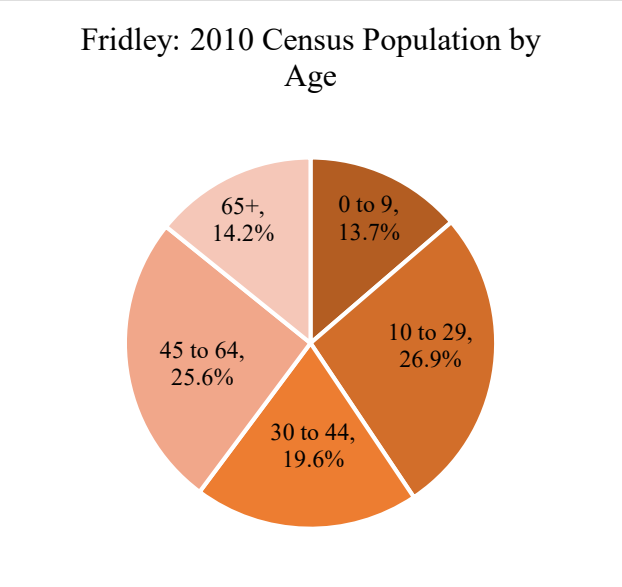


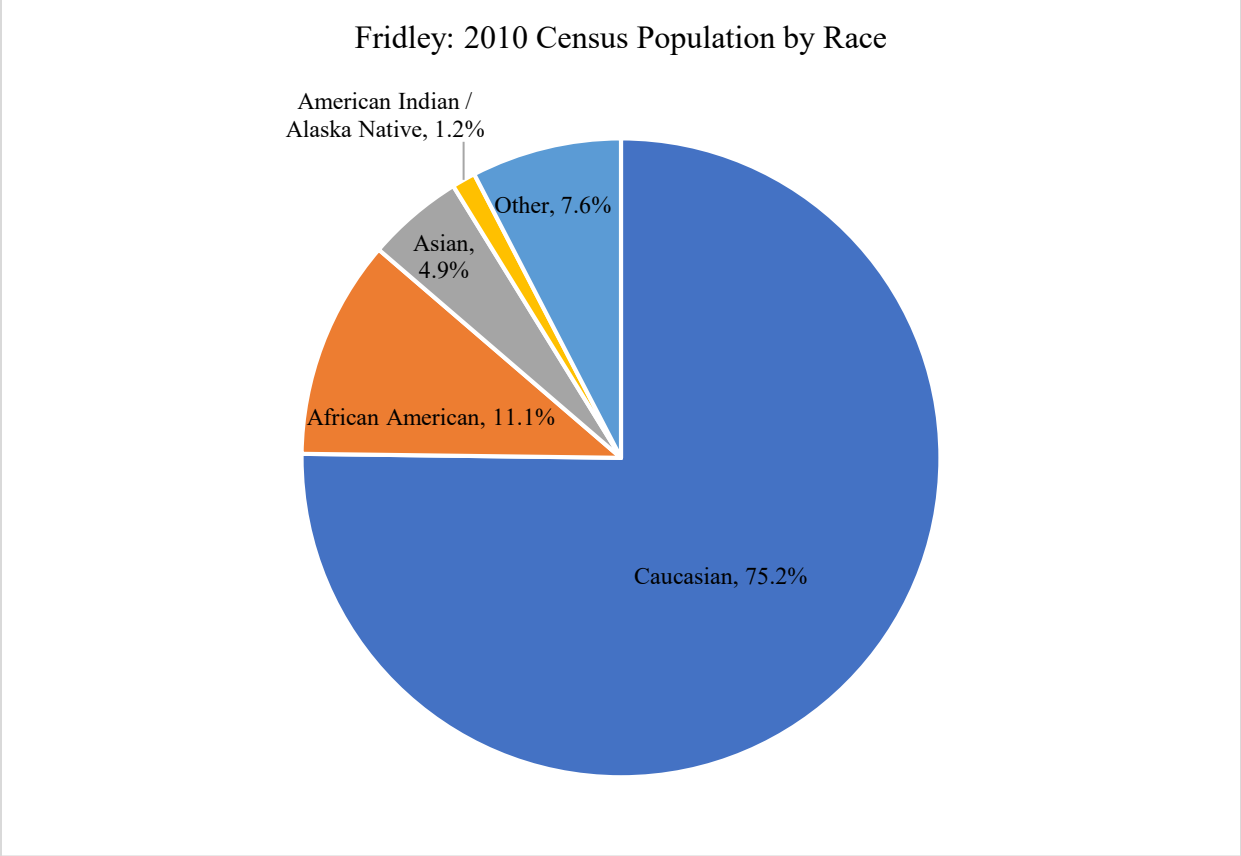


4.2.2 Fridley

The city of Fridley is located in Anoka County, west of the former TCAAP.

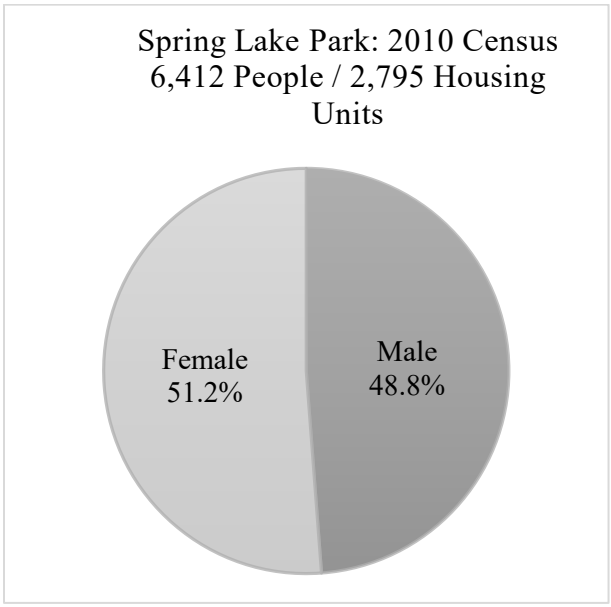


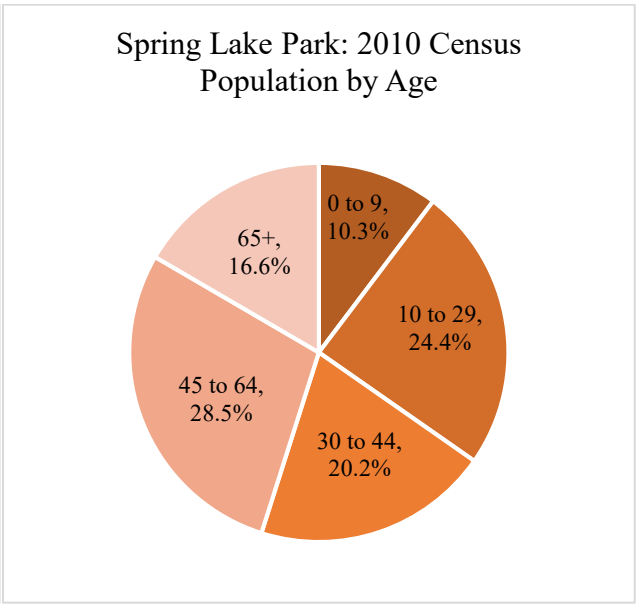


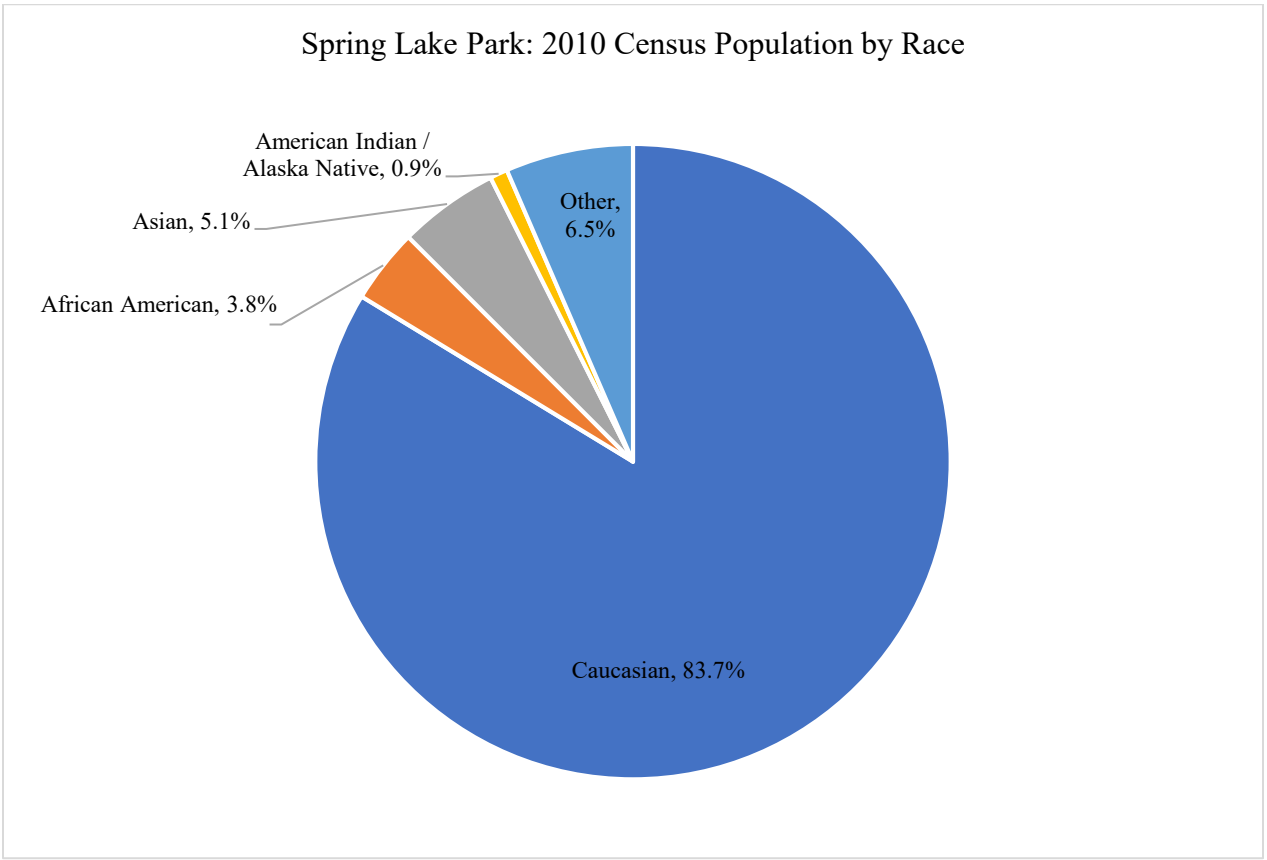


4.2.3 Spring Lake Park

Spring Lake Park is located in Anoka County, northwest of the former TCAAP.

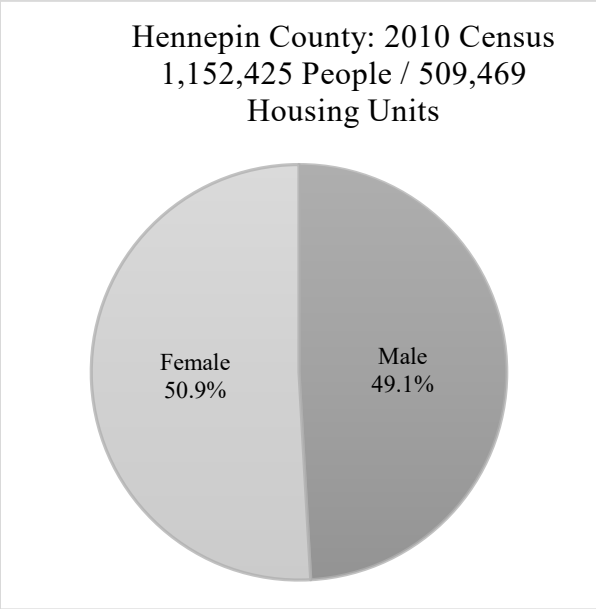


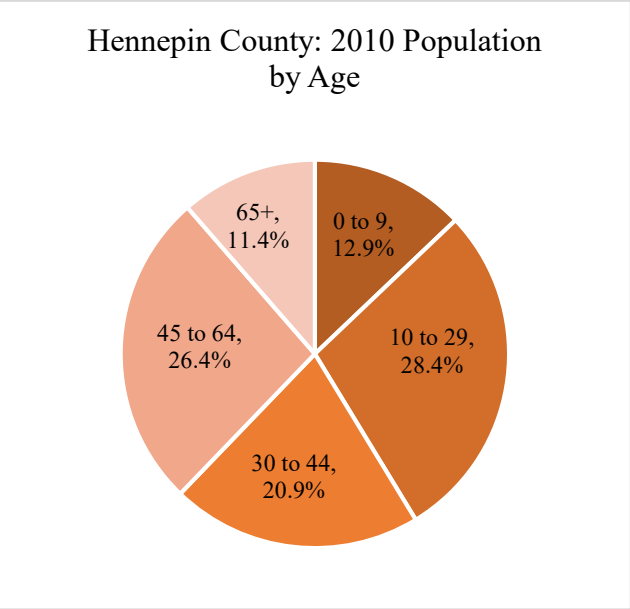


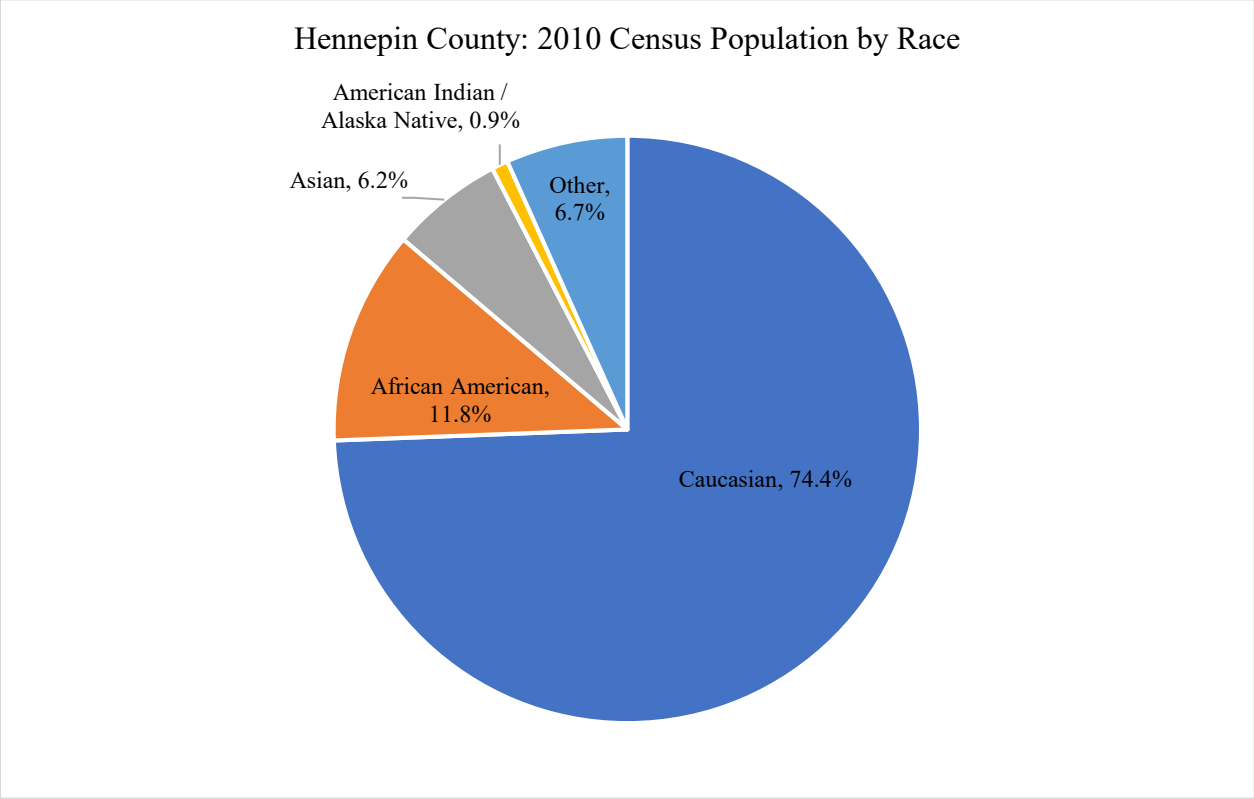


4.3 Hennepin County

Hennepin County is located in the Minneapolis-St. Paul metropolitan area, west of the former TCAAP.

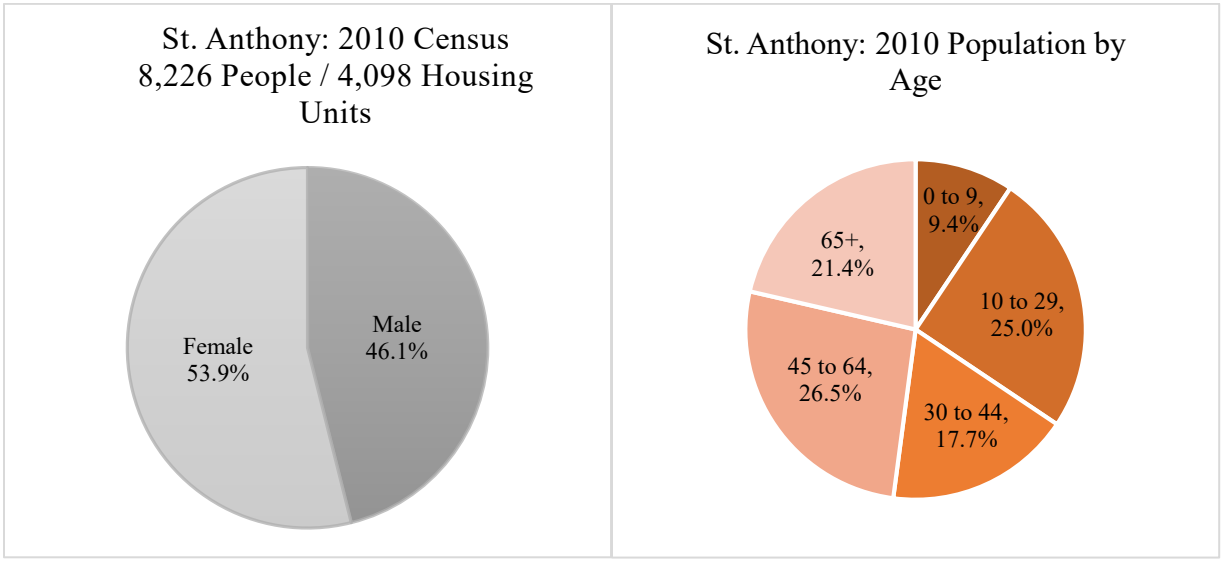


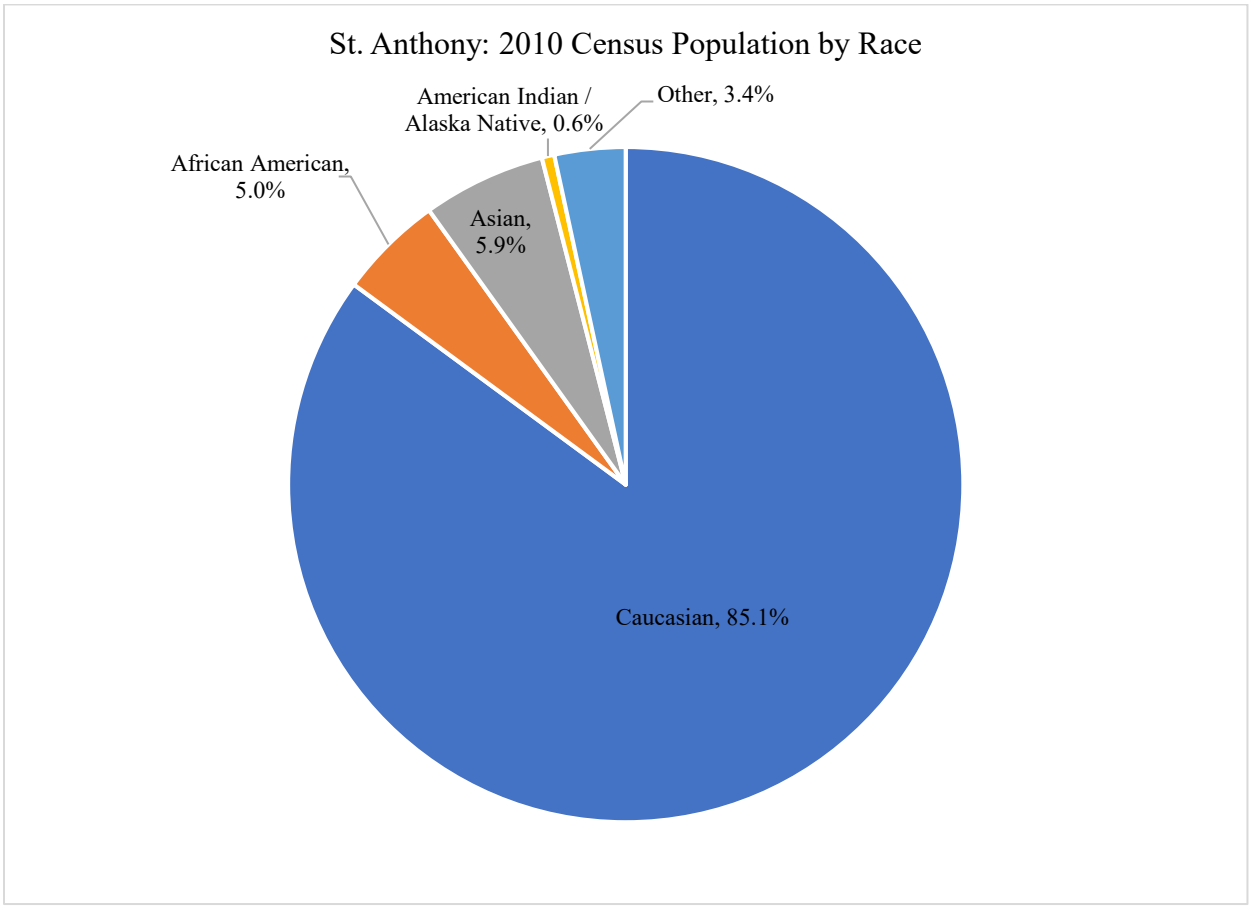




4.3.1 St. Anthony

St. Anthony is located in Ramsey and Hennepin Counties, southwest of the former TCAAP.





4.4 History of Community Involvement

A Restoration Advisory Board (RAB) was established at TCAAP in 1996 and identified a mission statement and operating procedures. A RAB is a partnership between the surrounding community, the Army, the State, and the USEPA that provides a forum for discussions to increase community understanding and support for cleanup efforts. It helps with improving the soundness of government decisions and ensuring cleanups are responsive to community needs. As indicated in the Office of the Secretary of Defense Restoration Advisory Board Handbook (February 2007), "the Installation Commander will review community interest to establish a RAB at least every 24 months." In 1999, the RAB was awarded a Technical Assistance for Public Participation (TAPP) grant, which was used to provide support from the University of Minnesota. Community RAB members have the opportunity to participate in the Army/regulatory agency's Technical Review Committee (TRC) meetings. The RAB has historically provided input on the FS for Round Lake, and revisions to the OU2 LUCRD. The RAB is expected to be involved in future remedy evaluation and/or selection for Round Lake. The communication/membership committee helps recruit RAB members and keeps the community informed. RAB members helped to communicate restoration activities to interested stakeholders in the early land transfer process through review of technical documents and participation in stakeholder meetings. The RAB has input to land use and institutional controls which will have an impact on TCAAP. The current TCAAP RAB meets on an event basis, as needed. The RAB website is available at: TCAAPRAB.org.

The first Community Relations Plan was published in 1987, and updated in 1991, 1997, and 2012. Other community relations activities have included community interviews conducted by the Army in 1996 to determine environmental issues and concerns related to TCAAP, and the distribution of the TCAAP Update newsletter in September 1992 to inform the surrounding communities about environmental restoration activities. Regular newsletters were published in the past and may be published now on an as-needed basis.

The Army has also participated in additional public involvement activities, such as public comment periods, mailing lists, and maintenance of an Information Repository and Administrative Record. These activities are discussed in Section 5.0.

4.5 Community Feedback

This section describes the methodology that TCAAP used to collect community input during the CIP process. This section also summarizes the communication preferences and concerns of the interviewees.

4.5.1 Interview Participants

To prepare this CIP, the Army conducted community interviews from March 4 to March 15, 2019, with people who work and/or live in the communities near the former TCAAP. Interviewees included general community members and residents who live near the former TCAAP, local government officials, local business owners, retirees, and business persons. Interviews were conducted telephonically.

4.5.2 Issue Identification Approach and Findings

The primary purpose of collecting input from the community is to identify issues and concerns so the Army can address them via community involvement efforts. To obtain this information, a total of 26 people from the surrounding communities were surveyed and interviewed regarding the issues and concerns associated with TCAAP's cleanup progress. The comments and insights from members of the community provided information to help design the TCAAP community involvement program. These findings are representative only of the individuals who participated in the community interviews and should not be construed as directly representative of the larger population. The interview questions and responses are provided in **Table 3**, and are further discussed in sections 4.6 and 4.7

Table 3. Community Interview Responses

Question	Response
1.) How long have you lived in this community?	Less than 5 years = 5 5 to 10 years = 4 11 to 20 years = 3 20+ years = 14

Question	Response
2.) What is your occupation?	Answers included the following (several professions listed were used in multiple answers): None, Retired, Recreation Commissioner, Executive Assistant, Environmental Educator, Police Chief, City Administrator, City Planner (2), Mayor, Communication Director, Student Life Assistant, City Forester, Receptionist, Fire Chief (2), Administrative Assistant (3), Funeral Director, Property Owner, Business Owner (Upholstery Store), Natural Resource Coordinator, Council Member, Social Justice Advocate, Engineer.
3.) How would you characterize the relationship between the Army/Twin Cities Army Ammunition Plant (TCAAP) and the surrounding communities?	Positive = 12 Neutral = 9 Negative = 1 I don't know = 4
4.) a) What do you know about the Army's cleanup and environmental restoration activities at TCAAP?	A little = 17 Nothing = 6 I am very familiar = 3
b) Are you interested in learning more about the environmental restoration and cleanup activities at TCAAP?	Yes = 12 No = 13 Unsure = 1
5.) a) How would you prefer to get information regarding the cleanup and environmental restoration activities at TCAAP?	a) Email = 15 Newspaper = 6 Website = 3 Newsletters = 2 Mail/Fliers = 2 Radio = 2 No Comment = 1 I already have enough information = 1 Not email = 1 Personal searches (print and online) = 1 *(Note: Some interviewees indicated multiple answers)*
b) What is the best way to distribute information about the cleanup and environmental restoration activities to the community? Feel free to name specific social media and news outlets.	b) City services, outreach and websites = 11 Local newspapers (print and online) = 10 Social media (Facebook, Twitter) = 10 Newsletters = 5 Email = 5 Fliers/Mail = 4 Website = 3 Radio = 1 Chamber Town Hall Meetings = 1 Community events = 1 Installation and community meetings = 1 *(Note: Some interviewees indicated multiple answers)*

Question	Response
6.) a) If you had questions about the Army's cleanup and environmental restoration activities, who would you ask/where would you go for assistance?	a) Don't know = 12 Internet search = 8 Local Government/Chamber employee = 7 Through a Personal Contact= 5 TCAAP (phone call or in-person) = 1
b) What channels/venues do you prefer to use when you have questions/concerns (for example: email, direct phone call, website comment submission, etc.)?	b) Email = 16 Website Submission = 8 In Person = 4 Phone Call = 4 Chamber Website = 1 Newspaper = 1 I don't know = 1 Personal searches (print and online) = 1 *(Note: Some interviewees indicated multiple answers for 6a and 6b)*
7.) Are you aware TCAAP has a public Information Repository containing documents pertaining to the investigation and restoration efforts at TCAAP?	a) Yes = 8 No = 18
8.) a) Are you aware that TCAAP has a formal Restoration Advisory Board (RAB) that serves as a forum for two-way communication between the installation, the community and other stakeholders, such as the state and local Tribes, regarding the investigation and restoration?	a) Yes = 6 No = 20
b) Is this something that interests you?	b) Yes = 4 No = 19 Maybe = 3

Question	Response
9.) Do you have any suggestions for how the Army could more effectively communicate regarding its cleanup and environmental restoration activities in Ramsey, Anoka, and Hennepin Counties?	County and City Website Bulletin Boards/ Newsletters/outreach = 8 Newspaper = 7 TCAAP Outreach = 6 Not sure = 6 Social media = 5 Chamber of Commerce and Local Governments = 4 Fliers/mailers = 2 TV/Radio = 2 Website = 2 Civic Groups/Churches/Public events = 1 Rate their performance = 1 Form a Board = 1 Partner with Universities = 1 County Public Works = 1 *(Note: Some interviewees indicated multiple answers)*
10.) Who in the community do you trust most to provide information about the restoration activities at TCAAP?	Local City/County Government = 15 Not Sure = 6 The Army/TCAAP = 5 Myself/ my own ability to find resources = 1 Department of Natural Resources = 1 Local Law Enforcement = 1 *(Note: Some interviewees indicated multiple answers)*
11.) Do you trust the Army's handling of the TCAAP restoration?	Yes = 18 Not sure = 8
12.) Are you familiar with your neighbor's/other community members' thoughts regarding the restoration?	No= 18 Yes = 8
13.) What would be the best location for TCAAP to hold any public meetings related to environmental restoration?	Respective City Halls = 8 At the installation = 8 Any Civic/Community Center = 4 Arden Hills = 3 Community Libraries = 2 Ramsey County Public Works = 2 Not Sure = 1 Any School Auditorium = 1 Local Chamber Meeting Room = 1 Not in North Oaks = 1 In Minneapolis = 1 North Heights Lutheran Church = 1 County Libraries = 1 North Oaks = 1 Arden Hills or New Brighton Community Centers = 1 (*Note: Several interviewees indicated multiple answers)*

4.6 Responses to Concerns

Based on the results of the interview process, just under half of interviewees (12) believe there is a positive relationship between the Army and the surrounding community, characterizing it as improving, friendly, or excellent. Almost all of the remaining interviewees are neutral or do not know about the relationship between the Army and the surrounding community. The relationship was qualified as adequate, neutral, or thought to be non-existent in some cases. Several respondents were unaware that the installation even existed or that there were ongoing restoration and cleanup activities. One individual who felt the relationship was positive mentioned that guided "bird watching" tours were conducted and expressed that letting people use portions of the land for this type of recreation has a positive impact on the relationship between the Army and the community. Another individual stated that the former Installation's proximity to the surrounding communities helps the Army stay involved in the community overall. Three interviewees expressed concerns, stating that they were not sure about the extent of cleanup activities and that the Installation's reputation was "suspect," "suspicious," or "not great on a larger level."

The surrounding community members who are aware of TCAAP are generally aware of the restoration program's existence and process, though most respondents expressed that they knew very little or the information they had was vague. The twenty respondents who indicated that they were familiar with the cleanup and restoration activities mentioned an awareness of site or water contamination and knew that military and government entities had in the past, or were presently, acting to resolve the issue. Some respondents were vague or unclear as to what remedies had been implemented or were ongoing as part of the restoration process and whether those remedies were working. Three of these respondents were confident the Army's treatments must be working and stated that TCAAP, the Army, and environmental regulators had been very responsive to the contamination overall. Two respondents were firm in their belief that corrective actions on the part of the Installation were in the past and not ongoing. Two respondents reported hearing about the contamination in the local news and three reported interest or concern about land use regulations. Of the 26 respondents, only 12 were interested in receiving more information; thirteen had no interest in learning more; one person was unsure and declined to respond. Comments from

respondents included concerns about the "amount of work left to do" and the sentiment that they "have all the information they need" unless contamination or land use conditions change.

Nearly half of respondents did not know who to contact if they had questions about the Army's cleanup and restoration activities at TCAAP. A total of 12 respondents said they simply did not know who to contact, and eight proposed that they would attempt to conduct a google or internet search if the need to contact the Army arose. Seven respondents said that they would reach out to a local government, city, or chamber employee through their local city website or through a contact that they already knew. Five respondents stated specifically that they would use a personal contact, such as a government representative/liaison or Army personnel, if they had concerns. One person stated that they would call TCAAP directly with any concerns. Over half of respondents said they would prefer to use email when addressing their questions or concerns, primarily because email is easiest to track and reference over time. Ten individuals expressed a preference for digital forms of communication, favoring a website comment submission or searchable websites to address questions and concerns. Four people emphasized that in-person communication would be most effective for them and four additional people preferred a phone call when they had questions or concerns. One respondent stated that they would like to receive answers to their questions in local news press releases and one person declined to respond.

While the consensus regarding the Army/community relationship was primarily positive, most interviewees were unaware of the information available to them. Eight interviewees that had previously worked or were currently working with TCAAP were familiar with the Information Repository. One interviewee responded that they were glad to have been made aware of the repository and wrote down the address to share with academic groups. Most of the interviewees were also unaware that TCAAP has a formal RAB for persons interested in communicating with the Army and other stakeholders regarding the investigation and restoration at TCAAP. Those few that knew of the RAB were either RAB members or had worked with regulatory agencies before. Most respondents indicated that they would not be interested in participating in the RAB. Three individuals stated that they are certain that they are interested in RAB participation in the future, with an additional respondent stating they were also interested but would need more information about the time commitment and general obligations. One respondent who did not have

a personal interest in RAB participation did mention that her husband would be interested if he knew that it existed.

Most interviewees indicated that they would trust their local city/county government the most to provide information about restoration activities. This was followed by the Army or TCAAP themselves as an information source. Respondents also listed other organizations such as the department of Natural Resources or local law enforcement. One interviewee stated that he only trusted himself to find and process information about the restoration activities. Again, a good number of respondents were not sure who they trusted because they needed more information or because it was not a topic that interested them. Eighteen respondents stated that they trusted the Army's handling of the TCAAP restoration, though many of those respondents were conditional in their trust saying things like, "I think I can", "to my knowledge", "for the most part", or "generally speaking." One of the 17 said that their trust was "absolute." The remaining respondents were not sure if they trusted the Army to handle the TCAAP restoration, either because they had knowledge of the past contamination and were wary or because they had never heard of the restoration previously.

Eighteen persons interviewed said that they were unaware of neighbors or community members thoughts regarding TCAAP's environmental cleanup and restoration. A few respondents expressed the following comments: "I don't have a handle on it, not really, nobody knows or talks about it, and I'm too new to know." Eight interviewees stated that they were familiar with their neighbor's thoughts on TCAAPs restoration. Comments included: "I know a little," "in general terms, I think we're all on the same page," "I have a positive inkling, and everybody knows about the restoration."

When asked about potential locations to hold public meetings, many interviewees suggested local city halls or at the former installation. The remaining top responses included any civic or community center, community libraries, any school auditorium, a local chamber meeting room, and Ramsey County Public Works. The sentiment is that wherever the meetings were held they should be as central as possible. Arden Hills was mentioned as a specific central region as well as Minneapolis with one respondent saying that North Oaks should specifically be avoided because it was "too far out." Only one respondent was not sure where to meet and declined to respond.

4.7 Summary of Communication Needs

Email was favored more than any other means as the preferred way for respondents to receive updates on cleanup and restoration activities, followed by press releases in local newspapers, websites, newsletters, mailings/fliers, the radio, and personal searches of print and digital resources. Local newspapers and city websites were popular recommendations by many respondents as a way of getting information about TCAAP to the community. Digital resources were emphasized as a means of communication since the surrounding areas are fairly densely populated. In addition to utilizing city and local government websites and services as an information platform, utilization of social media, such as city, government and community partner Facebook and Twitter pages was recommended. One interviewee suggested that the Instagram page of the local university's Creation Restoration club be relied upon as a resource for reaching out and educating the community. Newsletters, fliers, mail, websites, email, and radio were all popular recommendations for spreading this kind of information in print and digital forms so that those who seek it out can simply look for it to find it. Multiple interviewees emphasized the effectiveness of person-to person communication in addition to digital communication. One interviewee suggested that Chamber and Town hall meetings be used to better educate local governments that would reach out with this type of information on behalf of the Army. It was also recommended that the Army have a presence at community events to better reach the general public.

When asked if they had any suggestions about how the Army could more effectively communicate about cleanup and environmental restoration activities in Ramsey, Anoka, and Hennepin counties, the general sentiment was that city participation and general outreach would be most effective. A total of 12 respondents recommended that the Army should partner with local county and city authorities or administrators and local governments to utilize their existing websites, bulletin boards, newsletters, and public meeting venues for posting information and updates. Multiple respondents stated that they viewed the local city authorities as having more proximity and power over local issues and that "the city is easier to get a hold of than the Feds." Respective local county commissioners, city councils, and emergency management commissioners were suggested as government partners, especially in Arden Hills and Rice Creek Commons. Additional recommended partners included local universities in general and the Department of Natural

Resources. A total of 12 respondents stressed that proactive outreach by TCAAP and local governments in general was desired by the local community. Comments included that regular public relations activities would be nice as opposed to the Army "just responding to bulletins," and that people could find the information they needed if TCAAP "made sure it was out there on the web." Local Newspapers like the Star Tribune, Pioneer Press, and city newsletters were recommended by seven people as a means of distributing information. Social Media, particularly Facebook and Twitter, was recommended as well as fliers, mailers, TV, local Public Radio, civic groups, churches, public events, and websites. One respondent suggested that TCAAP create an interface where the community could rate their performance and submit it for review. Six interviewees were not sure how TCAAP could better reach out; reasons included needing more information and not having an interest. One respondent declined to elaborate.

5.0 COMMUNITY INVOLVEMENT ACTIVITIES

The community involvement activities presented in this section are based on regulatory guidance outlined in the USEPA's *Superfund Community Involvement Handbook* (USEPA, 2016) and the *RCRA Public Participation Manual* (USEPA, 2017). The activities are presented below in the order of those required to occur at particular milestones throughout the program followed by those that are appropriate for the program based on community interest or project circumstances.

5.1 Point of Contact (POC)

For questions related to the environmental cleanup actions at TCAAP, community members should contact the following office:

Cathy Kropp
Environmental Public Affairs Specialist
United States Army Environmental Command
usarmy.jbsa.aec.mbx@mail.mil

Additional contact information including media, citizens groups, and regulatory and federal, state and local elected officials are provided in **Appendix C.**

5.2 Information Repository/Administrative Record

An Information Repository is established at the Minnesota National Guard Arden Hills Training Site. A public Information Repository provides interested parties with background and technical information about the environmental cleanup program at TCAAP. The Information Repository includes work plans, technical reports, summary documents, and other information of public interest (e.g., fact sheets and news releases). Examples of items currently contained in the Information Repository include:

- The Installation Action Plan,
- Facility Assessments,
- Facility Investigation Reports,
- Cleanup Work Plans and Reports,
- Site Closure Documentation,
- Correspondence with the regulatory community, and
- Collections of press releases, community notices, public meeting minutes, and fact sheets.

The Administrative Record for TCAAP is also located at the Minnesota National Guard Arden Hills Training Site. The Administrative Record includes information that may form the basis for selecting a response or remedial action. It includes all documents leading to the selection of any response action at the installation and contains documents similar to those located in the Information Repository.

The addresses for the locations of the Information Repository and Administrative Record are presented in **Appendix B**.

5.3 Fact Sheets/ Statement of Basis

Fact sheets can be prepared, as appropriate, to support TCAAP's community outreach program. Fact sheets are designed to provide information about site history, planned technical activities, schedule updates, and special-interest items.

5.4 Public Notices, Meetings, and Comment Periods

The Army will comply with the requirements for public notification, the review of PPs and public comment periods. Public notices will be placed in local newspapers to serve as official notification to the local community of plans for environmental activities, upcoming public involvement opportunities, public comment periods, and the availability of documents at the Information Repository.

Public meetings, both informal and formal, are intended to inform the community about ongoing site activities and to discuss and receive feedback from the public on proposed courses of action. All meetings will be announced through public notices, news releases, direct mailings, or a combination of the three. Meetings will be held at a location that is easily accessible to the general public. Fact sheets, including contact information for additional information, can be prepared to support all PPs and, as necessary, to support other meetings and presentations. Suggested meeting locations are provided in **Appendix D**.

Public comment periods will be held at specific phases or milestones in the cleanup process depending on the regulation that is guiding the cleanup at a particular site. A public comment period lasts for at least 30 calendar days under CERCLA guidance and 45 calendar days under RCRA guidance, allowing time for public review and comment on the proposed action. A public meeting may be held during the public comment period; comments made at public meetings and during the public comment periods will be responded to through a responsiveness summary.

5.5 Responsiveness Summaries

At the conclusion of public comment periods, the Army will prepare, or support the state regulator in preparing, a responsiveness summary or minutes that summarize and respond to the comments received during the public comment period, including those comments given at the public meeting. The responsiveness summary is issued as part of the document under comment and made available in the Information Repository listed in **Appendix B**.

5.6 Mailing List Update

Mailing lists are an important component of effective community outreach which ensure that interested community members, as well as other stakeholders and communities impacted by or interested in response activities, are kept informed of activities and opportunities for community involvement. An electronic mailing list can be used to distribute news releases, fact sheets, and other types of pertinent information for project activities.

The Army may add individuals to a mailing list upon request and will update the list as necessary and appropriate. The Army will provide information during all community participation activities as to how individuals and groups can be added to the electronic mailing list. Additionally, a non-electronic mailing list is maintained for those community members and stakeholders who prefer to receive project information via the U.S. postal service.

5.7 Speaker Bureaus/Open House

As program milestones are achieved, project representatives notify and meet with stakeholders (including regulatory agency representatives and the public, as needed) to discuss project status and field questions about proposed restoration actions.

5.8 Community Involvement Plan Updates

The CIP will be updated at least every five years or earlier if there are significant program changes. This CIP is a working document to guide the project staff. All or part of this plan may require revision due to new information or changes in community concerns and needs. The plan will be re-evaluated at these times to ensure that the method and schedule of community participation activities is appropriate.

5.9 Activity Schedule

The public will be notified of any PPs, public meetings and comment periods. Exact dates of the cleanup activities are not provided for two reasons. First, the exact date that each phase in the Army cleanup process will be completed is not known. Second, different sites can be in different

phases in the process depending on when each site was discovered, the relative risk or cleanup priority of the site, and funding available for cleanup.

5.10 Community Grant Opportunities

The TAPP is funding available to community members of an established RAB who need technical assistance in interpreting scientific or engineering issues connected with proposed cleanup activities. If an Army installation does not have an established RAB, community members are not eligible for TAPP. Community members of an established RAB who are interested in applying for TAPP must contact their applicable POC to confirm eligibility and request Army funding.

The Technical Assistance Services for Communities (TASC) program, which is partially funded by grants from the USEPA, helps communities understand the environmental cleanup and site reuse process. This program provides communities with independent educational and technical information needed to actively participate in solving environmental problems. While TASC primarily supports the Superfund program, support may also be provided to communities impacted by the RCRA or federal facilities or dealing with air or water environmental problems. Specific information regarding the TASC program is available at the following website: https://www.epa.gov/superfund/technical-assistance-services-communities-tasc-program.

6.0 REFERENCES

DoD Manual 4715.20, *Defense Environmental Restoration Program Management*, March 2012.

DoD *Relative Risk Site Evaluation Primer,* 1996.

Office of the Secretary of Defense, *Restoration Advisory Board Handbook*, February 2007.

U.S. Army, Army Regulation (AR) 200-1, *Environmental Protection and Enhancement,* 2007.

U.S. Army, Army Regulation (AR) 360–1, *The Army Public Affairs Program*, October 15, 2000.

Alliant Techsystems Inc./Global Environmental Solutions, Updated by Wenck Associates, Inc., *Community Relations Plan for New Brighton/Arden Hills Superfund Site (Twin Cities Army Ammunition Plant) Arden Hills, MN,* September 2012.

USAEC*, Twin Cities Army Ammunition Plant Installation Action Plan*, September 2016.

USAEC, *Restoration Advisory Board and Technical Assistance for Public Participation Guidance,* 2005.

USEPA*, A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents,* July 1999.

USEPA, Official Website Home Page at http://www.epa.gov

USEPA*, National Oil and Hazardous Substances Pollution Contingency Plan (The NCP),* January 1992.

USEPA, *Resource Conservation and Recovery Act (RCRA) Public Participation Manual*, 2017.

USEPA, *Superfund Community Involvement Handbook*, January 2016.

U.S. Census Bureau, American Fact Finder at http://factfinder.census.gov

FIGURE

Spring Lake Park
Mounds View
Brooklyn Park
North Oaks
Fridley
10
Shoreview
Brooklyn Center
694
Arden Hills
694
New Brighton
65
Hilltop
94
47
Columbia Heights
35W
51
Saint Anthony
Minneapolis
Roseville
36

LEGEND:

- Operable Unit 1 (North Plume)
- Operable Unit 2 of the New Brighton/ Arden Hills Superfund Site (the same area occupied by the Twin Cities Army Ammunition Plant in 1983, when the Site was placed on the NPL.)
- Operable Unit 3 (South Plume)
- Municipal Boundary

0 4,000 8,000 Feet

GRAPHIC SCALE

Twin Cities
(Minneapolis - St. Paul)

NOTES:

1. Operable Unit Areas adapted from Figure 2 of the OU2 ROD.
2. 2016 Aerial Photograph (Source: DigitalGlobe, Vivid - USA)

TWIN CITIES ARMY AMMUNITION PLANT
ARDEN HILLS, MINNESOTA

ANNUAL PERFORMANCE REPORT

Conceptual Illustration of Operable Units

PIKA ARCADIS a joint venture

FIGURE 1

City: Minneapolis Div/Group: IMDV Created By: MG Last Saved By: mgress
TCAAP
Z:\GISProjects_ENV\TCAAP_Arden_Hills_MN\MXD\2018-01\APR_2017\OU1_OU2_SiteMap_20180131.mxd 2/1/2018 8:24:59 AM

APPENDIX A

CERCLA/RCRA Equivalents

CERCLA	RCRA
Preliminary Assessment (PA)	RCRA Facility Assessment (RFA)
Site Inspection (SI)	Confirmation Sampling (CS)
Remedial Investigation/Feasibility Study (RI/FS)	RCRA Facility Investigation/Corrective Measures Study (RFI/CMS)
Proposed Plan (PP)/ Record of Decision (ROD)	Statement of Basis
Remedial Design (RD)	Design (DES)
Remedial Action (Construction) (RA-C)	Corrective Measures Implementation (Construction) (CMI-C)
Remedial Action (Operation) (RA-O)	Corrective Measures Implementation (Operation) (CMI-O)
Long-term Management (LTM)	Long-term Management (LTM)
Interim Remedial Action (IRA)	Interim Measure (IM)

CERCLA	RCRA UNDERGROUND STORAGE TANK (UST) TERMS
Preliminary Assessment (PA)	Initial Site Characterization (ISC)
Remedial Investigation (RI)	Investigation (INV)
Feasibility Study (FS)	Corrective Action Plan (CAP)
Remedial Design (RD)	Design (DES)
Remedial Action (Construction) (RA-C)	Implementation (Construction) (IMP-C)
Remedial Action (Operation) (RA-O)	Implementation (Operations) (IMP-O)
Long-term Management (LTM)	Long-term Management (LTM)
Interim Remedial Action (IRA)	Interim Remedial Action (IRA)

APPENDIX B

Information Repository and Administrative Record Locations

Information Repository:

Minnesota National Guard Arden Hills Training Site
4761 Hamline Ave.
Arden Hills, MN 55112
651-268-6870

Administrative Record:

Minnesota National Guard Arden Hills Training Site
4761 Hamline Ave.
Arden Hills, MN 55112
651-268-8670

APPENDIX C

Additional Contact Information

Media Contacts:

Newspapers

- New Brighton Bulletin
  2515 E. Seventh Ave.
  North St. Paul, MN 55109
  651-748-7800
  http://www.lillienews.com/articles/new-brighton-mounds-view-bulletin-news

- Shoreview Bulletin
  2515 E. Seventh Ave.
  North St. Paul, MN 55109
  651-748-7800
  http://www.lillienews.com/articles/shoreview-arden-hills-bulletin-news

- Shoreview Press
  4779 Bloom Avenue
  White Bear Lake, MN 55110
  651-407-1200
  https://www.presspubs.com/shoreview/

- Sun Focus
  4095 Coon Rapids Blvd.
  Coon Rapids, MN55421
  763-712-2400
  https://www.hometownsource.com/sun_focus/

- Pioneer Press
  10 River Park Plaza #700
  St. Paul, MN 55107
  651-222-1111
  https://www.twincities.com/

- Star Tribune
  650 3rd Ave. South Suite 1300
  Minneapolis, MN 55488
  612-673-4414
  http://www.startribunecompany.com/contact-us/

Television

- 5 EYEWITNESS NEWS/KSTP-TV (ABC)
  3415 University Ave.
  Saint Paul, MN 55114-2099
  612-588-6397
  https://kstp.com/

- KARE 11 (NBC)
  8811 Olson Memorial Hwy.
  Minneapolis, MN 55427
  763-546-1111
  https://www.kare11.com/

- WCCO-TV (CBS)
  90 S. 11th St.
  Minneapolis, MN 55403
  612-339-4444
  https://minnesota.cbslocal.com/

Radio

- Minnesota Public Radio
  The King Public Media Center
  480 Cedar Street, Saint Paul, MN 55101
  651-290-1500
  https://www.mpr.org/

Environmental and Active Citizens Groups:

- Minnesota Department of Natural Resources
  500 Lafayette Rd. St. Paul, MN 55155
  651-296-6157
  https://www.dnr.state.mn.us/

Regulatory Contacts:

- Minnesota Pollution Control Agency
  Metro District Office
  Site Remediation Section
  520 Lafayette Road North
  St. Paul, MN 55155-4194
  651-757-2572
  https://www.pca.state.mn.us/

- US Environmental Protective Agency, Region V
  77 West Jackson Boulevard
  Chicago, IL 60604
  312-353-5577
  https://www.epa.gov/aboutepa/epa-region-5

Federal Elected Officials:

- Senator Amy Klobuchar (D)
  https://www.klobuchar.senate.gov/public/

    - Washington, DC Office
      425 Dirksen Senate Building
      Washington, DC 20510
      202-224-3244

    - Greater Metro Office
      1200 Washington Ave. South Room 250
      Minneapolis, MN 55415
      612-727-5220

- Senator Tina Smith (D)
  https://www.sasse.senate.gov/public/

    - Washington, DC Office
      720 Hart Senate Office Building
      Washington, DC 20510
      202-224-5641

    - Saint Paul Office
      60 Plato Blvd. East Suite 220
      Saint Paul, MN 55107
      651-221-1016

State Elected Officials:

- Governor Tim Walz
  Minnesota State Capitol
  130 State Capitol
  75 Rev Dr. Martin Luther King Jr. Blvd.
  St. Paul, MN 55155
  651-201-3400
  https://mn.gov/governor/

- Lieutenant Governor Peggy Flanagan
  Minnesota State Capitol
  130 State Capitol
  75 Rev Dr. Martin Luther King Jr. Blvd.
  St. Paul, MN 55155
  651-296-2084

Local Elected Officials:

- Representative Dean Phillips (D, District 3)
  https://phillips.house.gov/

    - Washington, DC Office
      1305 Longworth House Office Building
      Washington, DC 20515
      202-225-2871

    - Minnetonka Office
      13911 Ridgedale Dr. Suite 200
      Minnetonka, MN 55305
      952-563-4593

- Representative Ilhan Omar (D, District 5)
  https://omar.house.gov/

    - Washington, DC Office
      1517 Longworth House Office Building
      Washington, DC 20515
      202-225-4755

    - Minneapolis Office
      404 3rd Ave. North Suite 203
      Minneapolis, MN 55401
      612-333-1272

Mayors/City Council

Arden Hills

- Mayor David Grant
  1679 Chatham Ave.
  Arden Hills, MN 55112
  651-538-0747

- City Council
  Arden Hills City Hall
  1245 W. Hwy. 96
  Arden Hills, MN 55112
  308-385-5444
  https://www.cityofardenhills.org/494/Council-Meetings

    - Councilmember Brenda Holden
      1881 Beckman Ave.
      Arden Hills, MN 55112
      651-636-2987

    - Councilmember Fran Holmes
      1804 Venus Ave.
      Arden Hills, MN 55112
      651-631-1866

    - Councilmember Dave McClung
      1416 Arden View Dr.
      Arden Hills, MN 55112
      651-332-0352

    - Councilmember Steve Scott
      4286 Norma Ave.
      Arden Hills, MN 55112
      651-604-0919

New Brighton

- Mayor Valerie Johnson
  1866 Tioga Blvd.
  New Brighton, MN 55112
  651-491-3364

- City Council
  New Brighton City Hall
  803 Old Hwy. 8 NW
  New Brighton, MN 55112
  651-638-2100
  https://www.newbrightonmn.gov/about/city-council/

- Councilmember Emily Dunsworth
  1598 23rd Ave.
  New Brighton, MN 55112

- Councilmember Mary Burg
  224 Heritage Ln.
  New Brighton, MN 55112

- Councilmember Paul Jacobsen
  733 Oakwood Dr.
  New Brighton, MN 55112

- Councilmember Graeme Allen
  427 11th Ave. NW
  New Brighton, MN 55112

Shoreview

- Mayor Sandy Martin
  444 Lake Wabasso Ct.
  Shoreview, MN 55126
  651-490-4618

- City Council
  4600 Victoria St. N
  Shoreview, MN 55126
  651-490-4699
  https://www.shoreviewmn.gov/government/city-council

  - Councilmember Sue Denkinger
    4494 Chatsworth St.
    Shoreview, MN 55126
    651-490-3166

  - Councilmember Emy Johnson
    444 Lake Wabasso Court
    Shoreview, MN 55126
    651-490-4618

  - Councilmember Terry Quigley
    444 Lake Wabasso Court
    Shoreview, MN 55126
    651-490-4618

- Councilmember Cory Springhorn
  444 Lake Wabasso Court
  Shoreview, MN 55126
  651-490-4618

North Oaks

- Mayor Gregg Nelson
  1 Hill Farm Court
  North Oaks, MN 55127
  651-769-3664

- City Council
  100 Village Center Drive, #230
  North Oaks, MN 55127
  651-727-7751
  https://www.cityofnorthoaks.com/

  - Councilmember Rick Kingston
    5 Island Rd.
    North Oaks, MN 55127
    651-490-0446
    rkingston@cityofnorthoaks.com

  - Councilmember Martin Long
    13 Nord Circle Rd.
    North Oaks, MN 55127
    651-484-8849
    mlong@cityofnorthoaks.com

  - Kara Ries
    58 West Pleasant Lake
    North Oaks, MN 55127
    612-825-0442
    kries@cityofnorthoaks.com

  - Katy Ross
    8 Larkspur Ln.
    North Oaks, MN 55127
    651-482-8364
    kross@cityofnorthoaks.com

Lexington

- Mayor Mark Kurth
  9180 Lexington Avenue
  Lexington, MN 55014
  763-384-2792

- City Council
  9180 Lexington Avenue
  Lexington, MN 55014
  763-384-2792
  http://www.ci.lexington.mn.us/page/govt_city_council

    - Councilmember Kim DeVries
    - Councilmember John Hughes
    - Councilmember Mike Murphy
    - Councilmember Diane Harris

Columbia Heights

- Mayor Donna Schmitt
  590 40th Avenue NE
  Columbia Heights, MN 55421
  763-706-3607

- City Council
  590 40th Avenue NE
  Columbia Heights, MN 55421
  763-706-3600
  https://www.columbiaheightsmn.gov/government/mayor_and_city_council/index.php

    - Councilmember John Murzyn Jr.
      763-781-4983
    - Councilmember Bobby Williams
      763-414-3981
    - Councilmember Connie Buesgens
      763-788-5072

- Councilmember Nick Novitsky
  612-760-4463

Fridley

- Mayor Scott Lund
  7071 University Avenue NE
  Fridley, MN 55432
  763-572-3500
  Scott.Lund@FridleyMN.gov
  http://www.ci.fridley.mn.us/285/City-Council

- City Council
  7071 University Avenue NE.
  Fridley, MN 55432
  763-571-3450
  http://www.ci.fridley.mn.us/214/City-Council-and-Commissions

  - Councilmember Robert Barnette
    Robert.Barnette@FridleyMN.gov

  - Councilmember Tom Tillberry
    Tom.Tillberry@FridleyMN.gov

  - Councilmember Steve Eggert
    Stephen.Eggert@FridleyMN.gov

  - Councilmember Ann Bolkcom
    Ann.Bolkcom@FridleyMN.gov

St. Anthony

- Mayor Jerry Faust
  3301 Silver Lake Road,
  St. Anthony, MN 55418
  612-782-3301

- City Council
  3301 Silver Lake Road
  St. Anthony, MN 55418
  612-782-3301
  https://www.savmn.com/240/Mayor-City-Council

- Councilmember Hal Gray
  https://www.savmn.com/244/Council-Member-Hal-Gray
- Councilmember Jan Jensen
  https://www.savmn.com/245/Council-Member-Jan-Jenson
- Councilmember Thomas Randle
  http://www.savmn.com/243/Council-Member-Thomas-Randle
- Councilmember Randy Stille
  https://www.savmn.com/246/Council-Member-Randy-Stille

APPENDIX D

Meeting Locations

Meeting Locations:

Note: Locations were recommended by three or more interviewees

The most recommended location was each respective area's city hall, the addresses of which are listed in Appendix C. The next most popular areas are listed in order of popularity below:

Minnesota National Guard Arden Hills Training Site
4761 Hamline Ave.
Arden Hills, MN 55112
651-268-6870
(or other installation venue)

Ramsey County Public Works Building
1425 Paul Kirkwold Dr.
Arden Hills, MN 55112
651-266-7100

Other general locations included the local libraries, school auditoriums, and Chamber of Commerce Meeting rooms.