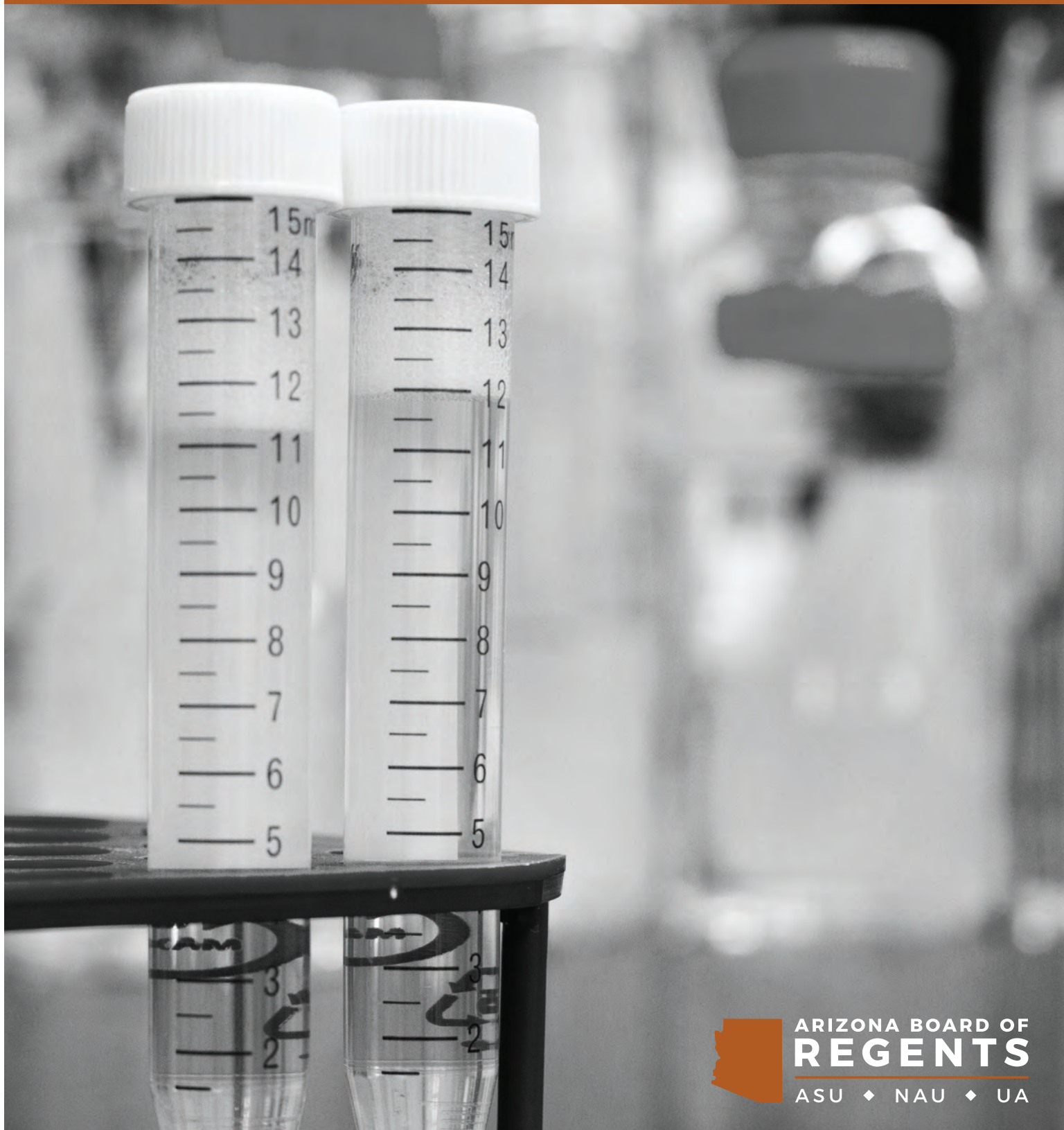


TRIF 3-YEAR PLAN

ARIZONA BOARD OF REGENTS



ARIZONA BOARD OF
REGENTS
ASU ♦ NAU ♦ UA

This page intentionally left blank

About This Plan

The Technology and Research Initiative Fund (TRIF) Plan summarizes the program investments and predicted outcomes for FY2022-2024. This plan incorporates a few modifications from past years. The plan has been shortened from 5- to 3-years in duration. Each proposed TRIF investment has a 1-page program proposal including a problem statement, program description, university's advantage and benefit to Arizona. Each program proposal focuses on one of the five strategic research areas:

1. Improving Health;
2. Water, Environment and Energy Solutions;
3. National Security Systems;
4. Space Exploration and Optical Solutions and
5. Workforce Development.

In addition, each program's funding proposal is subdivided into how much of the program funding is directed toward fundamental research stages:

- Basic Research,
- Applied Research,
- Development and
- Research Infrastructure.

Where Basic Research is defined as 10+ years to a potential commercial product, Applied Research is defined as 2-5 years to a commercial product and Development is defined as less than 2-years to a commercial product. Additionally, Research Infrastructure investment is defined as resources and related services that are used to conduct research. Research Infrastructure is critical to the advancement of the research enterprise and crosses all research investment stages.

Executive Summary

This report summarizes Arizona's three State Universities plans to invest TRIF funds, over the next three years. This plan represents a diverse portfolio of research and workforce development programs that promises a significant benefit to the State of Arizona. The program investments are classified in terms of one of the five research areas:

1. Improving Health;
2. Water, Environment and Energy Solutions;
3. National Security Systems;
4. Space Exploration and Optical Solutions and
5. Workforce Development.

Each program's funding is further categorized from a research stage or pipeline perspective:

- Basic Research,
 - Applied Research,
 - Development and
 - Research Infrastructure.
- The largest TRIF investment by the University Enterprise is in Improving Health, see Figure 1. In total 31% of funding is directed toward Improving Health.
 - From a research stage perspective, the largest TRIF investment by the University Enterprise is in Research Infrastructure, see Figure 2. In total 38% of funding is directed toward maintaining and enhancing Research Infrastructure.
 - ASU's largest TRIF investment area, 45%, is in Improving Health, UArizona's largest investment area, 39%, is in National Security Systems, and NAU's largest investment area, 55%, is in Workforce Development, Figure 3.
 - From a research stage perspective: ASU's largest investment, 37%, is in Applied Research, UArizona's, 49%, is in Research Infrastructure and NAU's, 72%, is in Research Infrastructure, see Figure 4.

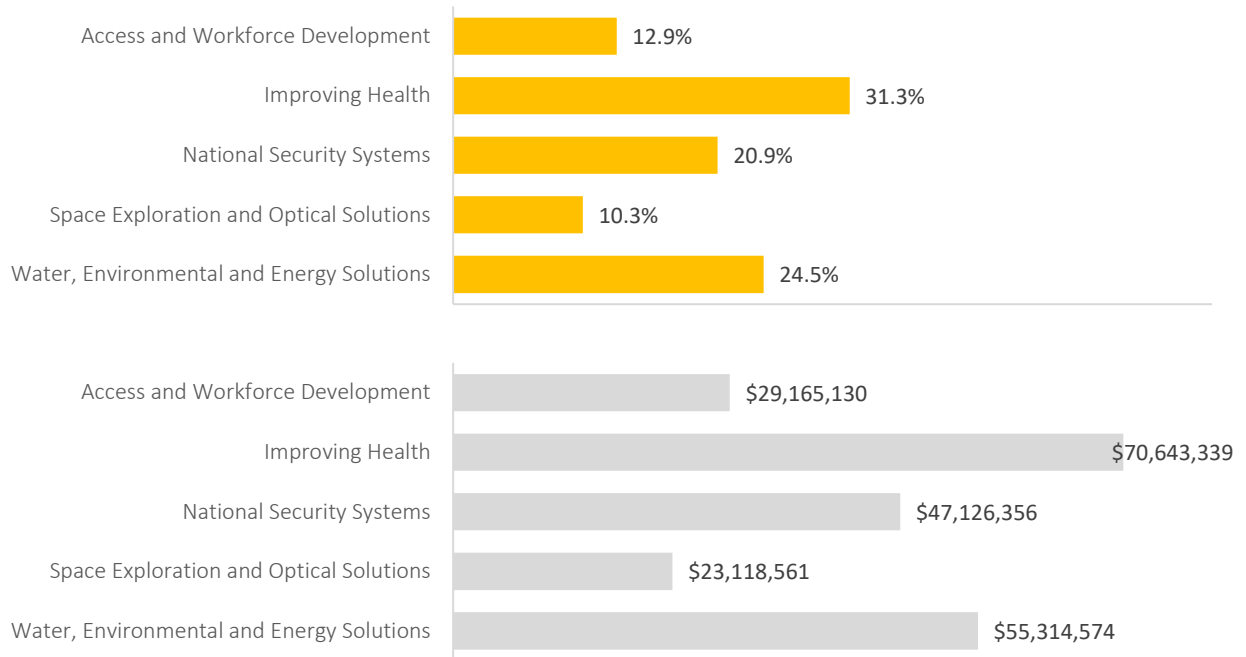


Figure 1. The University Enterprise Proposed 3-Year TRIF Spending by Program Area

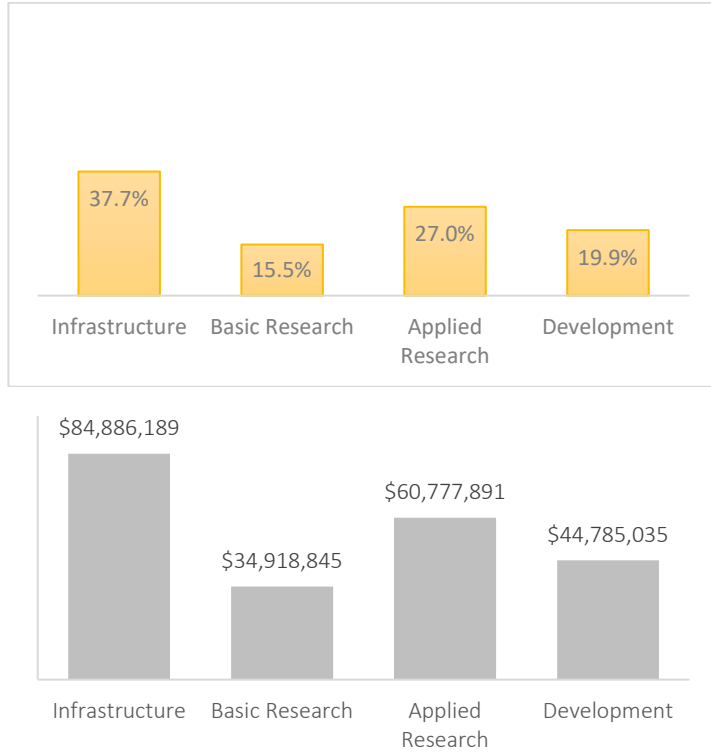
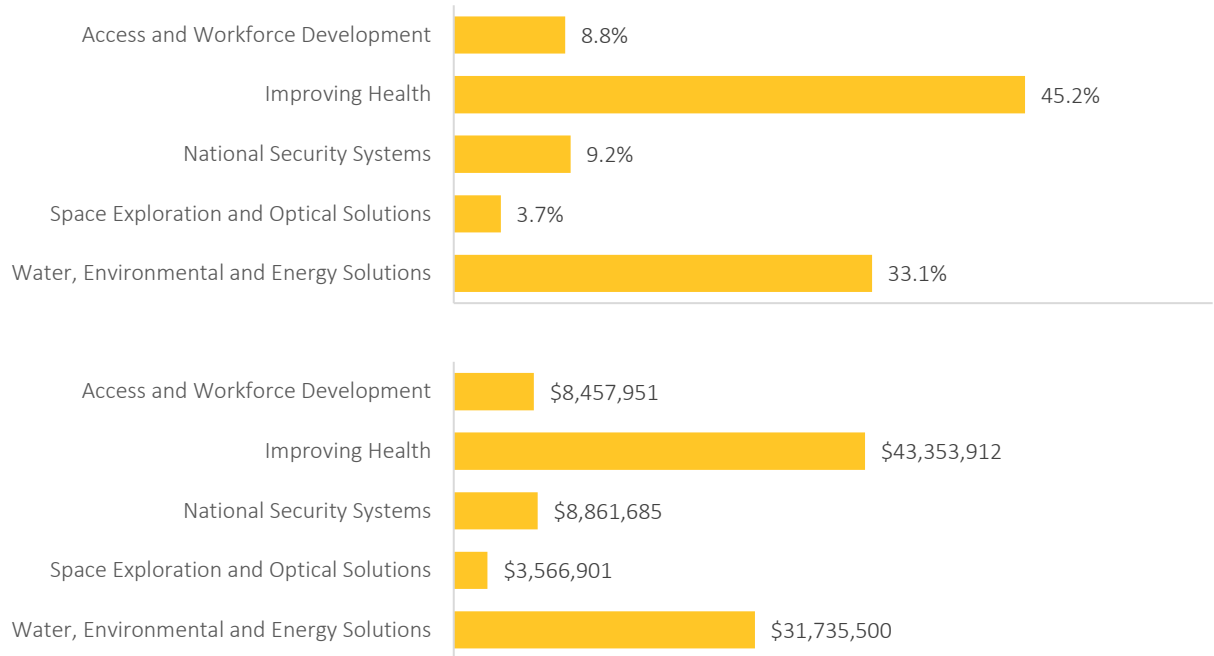
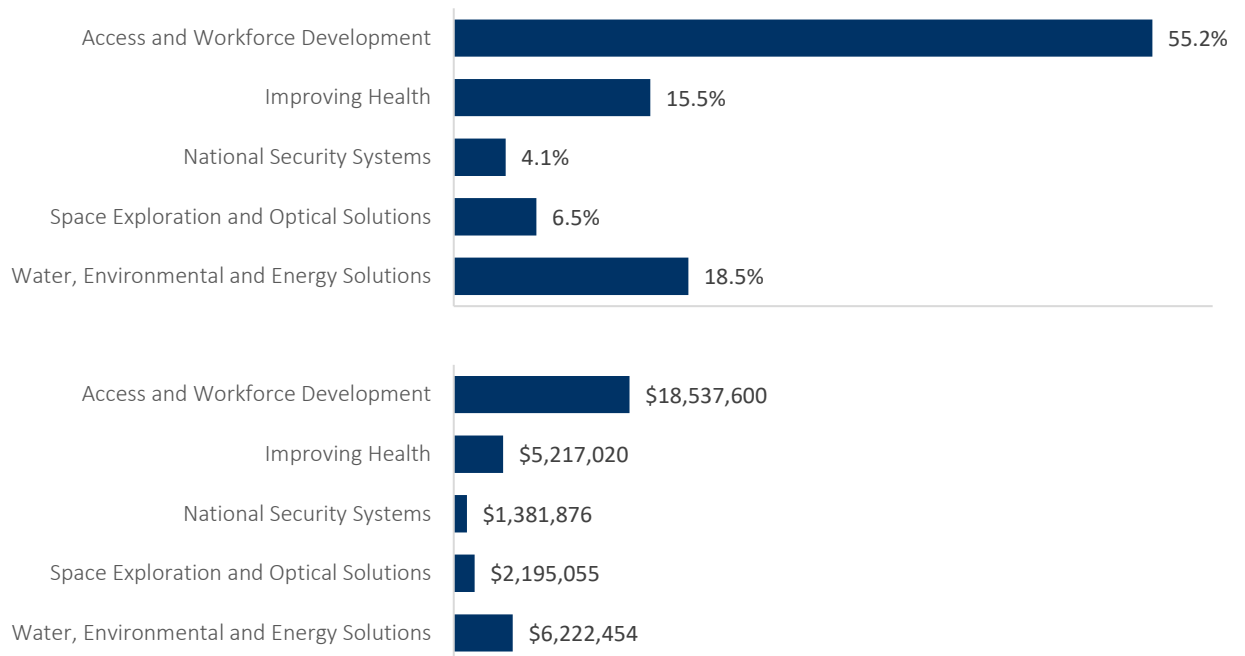


Figure 2. The University Enterprise Proposed 3-Year TRIF Spending by Research Stage

Arizona State University Proposed 3-Year TRIF Spending by Program Area



Northern Arizona University Proposed 3-Year TRIF Spending by Program Area by Program Area



University of Arizona Proposed 3-Year TRIF Spending by Program Area

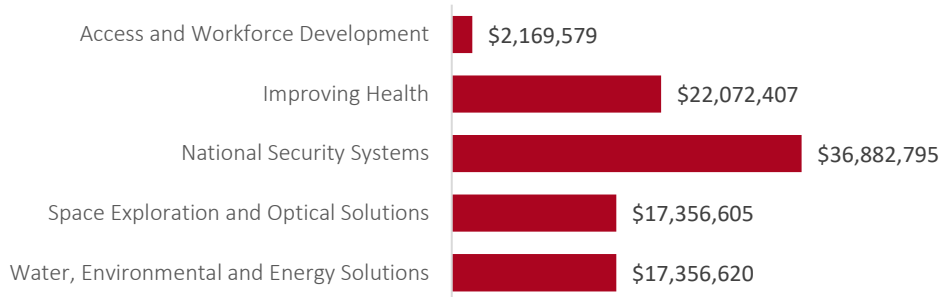
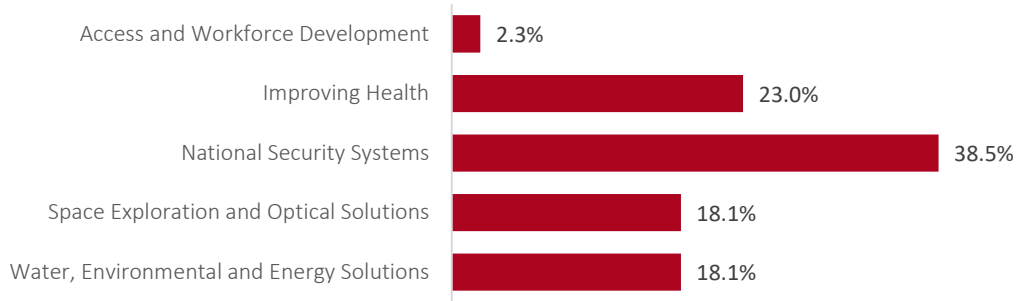
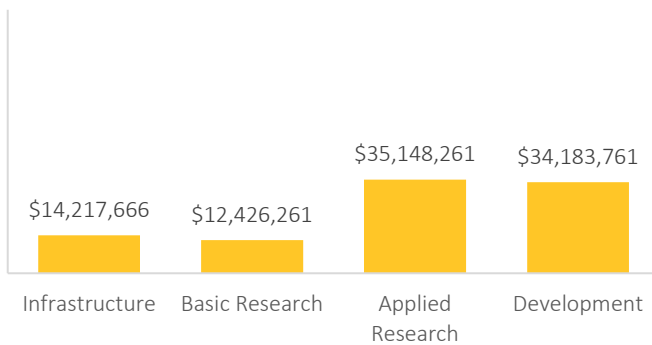
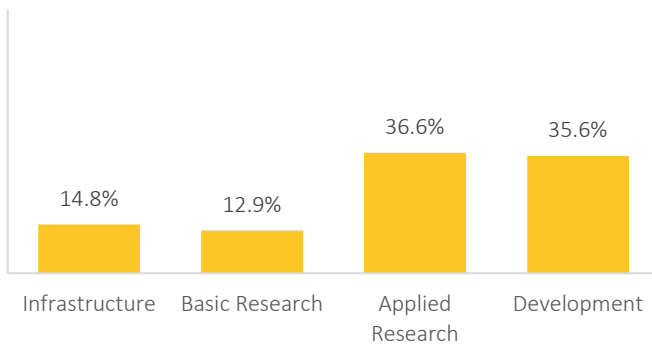
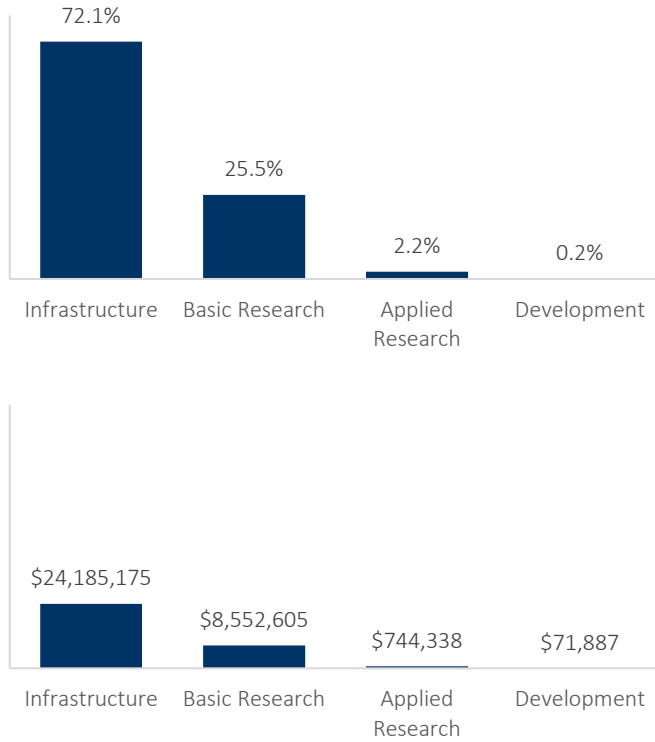


Figure 3. Institutional Research Area Investment

Arizona State University Proposed 3-Year TRIF Spending by Research Stage



Northern Arizona University Proposed 3-Year TRIF Spending by Research Stage



University of Arizona Proposed 3-Year TRIF Spending by Research Stage

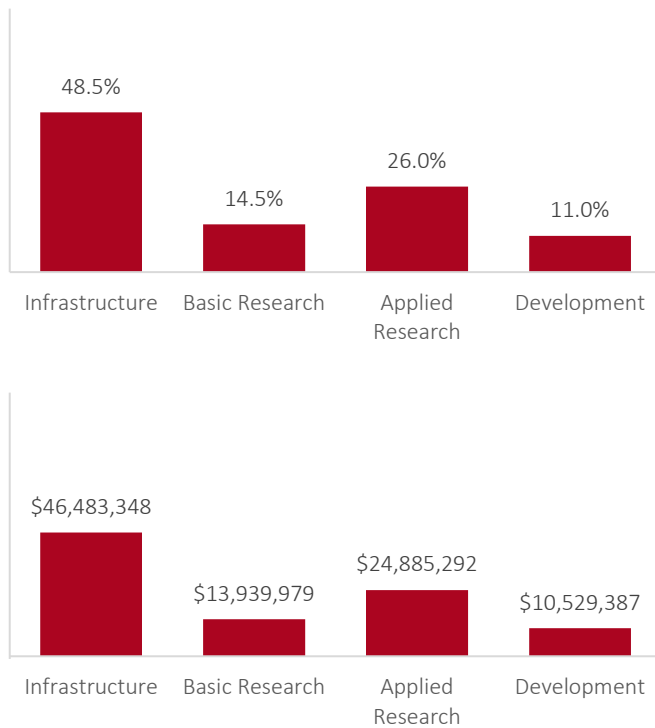


Figure 4. Institutional Research Stage Investment Breakout.