Executive Summary

Oregon's statewide imagery program has been highly successful, providing statewide aerial imagery from 1995 through the present. Formalized in 2016 as the Oregon Statewide Imagery Program (OSIP) and managed by Enterprise Information Services (EIS), the program has collected a new statewide orthoimagery digital geospatial dataset every two years. The success of OSIP has come through the substantial efforts needed to fund each update cycle. Each time, there was uncertainty as to whether there would be sufficient money to contract another update. Thus, a widely used and up to date basemap covering all of Oregon seems to face an uncertain future.

OSIPs goals are to:

- Create a common up to date basemap for government, business, and the public
- Provide high quality current data without regard to the ability to pay for data
- Meet the most common needs of every level of Oregon government (cf. ORS276A.500(5))
- Provide a stable program that can be expanded or enhanced over time
- Meet the Oregon Data Framework mandate to provide imagery as a consistent, updated data theme

This study examined how to transition OSIP from a two-year, uncertain, funding process to a long-term funding stream. The transition is essential for OSIP to continue meeting its goals. The study conducted a survey, interviews, and a workshop. Those activities showed that OSIP is doing an excellent job in meeting the goals listed above. The program has been highly beneficial.

A key finding of the study is that stable funding is essential to the program's continued success. Stable funding needs to include state staff time to manage it and provide technical services that support it. The most appropriate means of funding OSIP is through an enduring state budget appropriation. The state budget appropriation should be used to fund a multi-acquisition contract with one or more aerial photography vendors.

Another key finding is that there is great demand for improving the aerial imagery OSIP offers. Today, most local governments, industries, and many other government bodies use higher resolution imagery than OSIP produces. They also use oblique (side view) imagery. Oblique images now have more mapping and measurement capabilities than top-down orthoimagery like OSIP provides. Example capabilities include mapping and measuring structure heights, sloping roof areas, structure volumes, seeing signage and structure façades.

The study proposes three possible outcomes for OSIP in the long-term, designated as service tiers. These are illustrated in the following chart: white/green checkmarks indicates imagery that fully meets use needs, plain checkmarks show imagery minimally meets use needs and red cross

marks show imagery does not meet needs. The Optimal Service Tier has the greatest number of uses, the Current Service Tier (today's OSIP) the fewest. In between is an Improved Service Tier. It is not as beneficial as the Optimal Service Tier but far better than the Current Service Tier.

Functional need	Optimal Tier	Improved Tier	Current Tier
Air quality monitoring	✅	✅	✅
Assessing property value	✅	✓	❌
Disaster recovery	✅	✓	❌
Economic development	✅	✓	❌
Emergency management	✅	✓	❌
Forestry and forest management	✅	✅	✓
Law enforcement	✅	✅	✓
Long-term planning	✅	✅	✓
Near-term planning	✅	✅	✓
Public health	✅	✅	✓
Public safety (fire and police actions)	✅	✅	❌
Site selection	✅	✅	❌
Transportation infrastructure	✅	❌	❌
Utility infrastructure (power, water, sewer)	✅	❌	❌

Annual costs range from 1.5 million dollars for Current Service Tier with dedicated support to 3.5 million dollars for the Improved Service Tier to 7.9 million dollars for the Optimal Service Tier.

It is hard to calculate direct financial return provided by aerial imagery. However, the fact that it is pervasive in every aspect of modern life, from mobile phones to large-scale emergency response and recovery clearly shows its value. The Optimal Service Tier, recommended by this study, will be a better investment of public funds than continuing with the Current Service Tier.