How to Get the Most Value from your Ortho Project

When planning your next orthoimagery project, there are many measures you can take to control costs and get more value for your dollar. For example, finding funding partners and collaborations can enable sharing of fixed costs, providing a lower overall cost for all participants. Careful planning of your project can further reduce the annual cost of regular imagery updates. If you tap into the right resources and plan it right, you can save your organization a significant amount of money and stay within your budget.

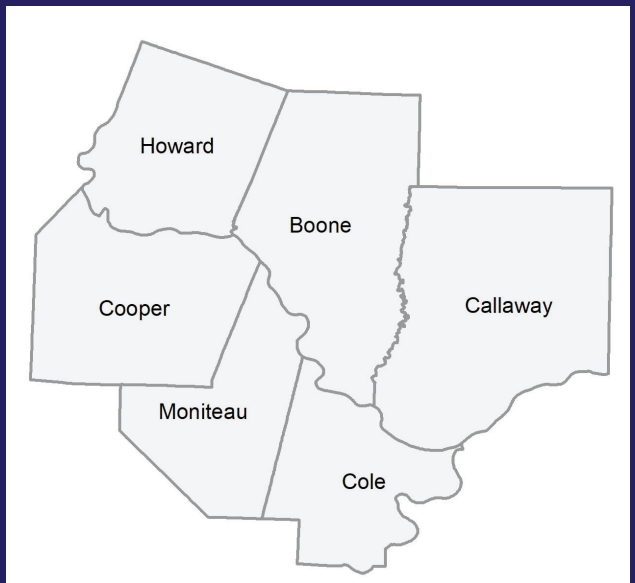
Funding Partners

Before beginning an orthoimagery project, research potential sources of state and federal funds. On a federal level, the Natural Resources Conservation Service (NRCS) and National Geospatia-Intelligence Agency (NGA) have programs with funding available. For state funds, look into the Department of Revenue and Department of Conservation, the latter being an especially promising source if there is state conservation or park land in the project area. You may also want to try contacting the Department of Transportation. On a local level, 9-1-1/ First Responder organizations are often willing to collaborate on mapping projects. These entities may offer to contribute to the project in exchange for use of the imagery. These are just a handful of ideas; with a little research you may be able to find other entities that would be willing to become partners on your project.

Forming Collaborations

You may also be able to reduce imagery costs by getting neighboring entities to join your mapping project. The per square mile cost drops as you increase the total project area. Collectively having a larger project area, each participant will enjoy an economy of scale and can save a significant amount of money.

Boone County Consortium Project Area



Boone County Consortium included the counties in this graphic, the City of Columbia, the University of Missouiri - Columbia and other regional partners.

Many of Surdex's clients are collaborations, consortiums (see Boone County Consortium map above) or councils of government (COGs). By working together, groups share the costs and the benefits of group buying power. For example, smaller counties may not have a GIS specialist, but a larger city is more likely to have one. If these two entities were to form a collaboration, the smaller entity could benefit from the expertise of the GIS specialist.

Another opportunity to save is to ask other entities within the project area if they are interested in imagery buy-ups; perhaps a city has an interest in obtaining higher resolution imagery. If a city were considering a project on its own, it may only be able to afford 12" GSD imagery; as part of a group, the collective buying power could potentially enable them to obtain 6" GSD imagery at a lower cost than if acting alone.

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Alternating Purchase Periods

Another strategy that makes regular imagery collection affordable is setting an acquisition schedule that fits your budget. One method of reducing annual cost is to collect a portion of your total project area each year. As an example, if you collect only one third of your area of interest each year, you will have updated imagery every three years across the area, on a rotating schedule.

Alternatively, you could collect imagery over the entire project area every few years. It is very common for municipalities or counties to collect imagery every 2-4 years. If your entity desires regular acquisition of more than just imagery (perhaps you are interested in LiDAR), you can create a rotating acquisition schedule (such as orthoimagery in year one, LiDAR in year two).

Right Resolution

One of the best ways to derive the most value from your imagery is to select the right resolution. In most rural areas, 6" GSD or 12" GSD imagery is sufficient to view the features you desire to see – generally there is no reason to obtain 3" imagery of agricultural fields. If you only need 6" imagery of part of your project area, you can also split your project area into different resolutions. In this way you only pay the price for the higher resolution over the area where you actually need it. Surdex can easily accommodate multiple resolutions and resample higher resolution areas to create a single, seamless project. If you want to learn more about how to select the proper resolution, read our article titled "What Orthoimagery Resolution is Right for Me?"

Summary

With the proper resources and planning, you can design an orthoimagery project that fulfills your needs while still fitting your budget. Perhaps you will be able to collect even more frequently or at a higher resolution than before if you coordinate with the right partners or form a collaboration. If you plan your schedule properly, you may be able to fit additional geospatial products into your budget, such as LiDAR data, topographic mapping or planimetric mapping.

Contact us if you'd like to learn more about forming cooperative partnerships or how to design your project to the appropriate timeline and resolution. We can also help you examine your mapping needs over multiple budget cycles. It's our aim to help you get the most value for your investment.