



Statewide Aerial Imagery Program

Request: \$350,000 annually

Problem / Opportunity

Every odd year (2011, 2013, 2015) the value of residential property is reassessed by a county assessor. The property tax comprises nearly 60% of local government revenue in Missouri (US Census Bureau, Census of Governments). It is important that these assessments are conducted fairly and uniformly to the extent possible. Within Missouri, due to Missouri Statutes and the Hancock Amendment, the growth in Missouri property tax revenue cannot increase more than the general inflation rate or by 5%, whichever is lower. However, the limitation does not apply to new construction or property improvements. The importance of securing equity in the assessment through capturing new construction and improvements at local levels can be greatly facilitated by new aerial imagery.

Aerial imagery has become the base layer for state and local government across the nation. Most larger cities and urbanized counties are already collecting imagery on a regular basis, with the standard image resolution for local government being a six inches. These local governments use the imagery for tax assessment, resource management, planning, and other uses. However, other areas of the state are using much older imagery and therefore creating lags or gaps in the collection of real property tax. The need for up-to-date imagery has become a requirement for all levels of government and by developing a cyclic plan to obtain large portions of the state on a regular basis, all levels of government can then benefit.

Current Situation

The State, in partnership with USGS, obtained two foot pixel resolution imagery for the state from 2007 to 2009. As part of the project, a State purchasing mechanism was created to allow local government to use the State's contract. The expectation being that through partnering and cost-sharing with local governments, a lower cost could be achieved. The State's Photogrammetric Services contract has just been re-bid and awarded to four pre-qualified providers of aerial imagery services. Again, this State contract was set-up to allow for local governmental use.

Many State agencies use imagery, including Transportation, Conservation, Natural Resources, SEMA, and others. As well, the continued need of local government for higher resolution imagery, combined with the high cost of acquiring it on their own, makes it attractive to develop imagery partnerships among the state and local governments to acquire even better imagery at a lower cost.

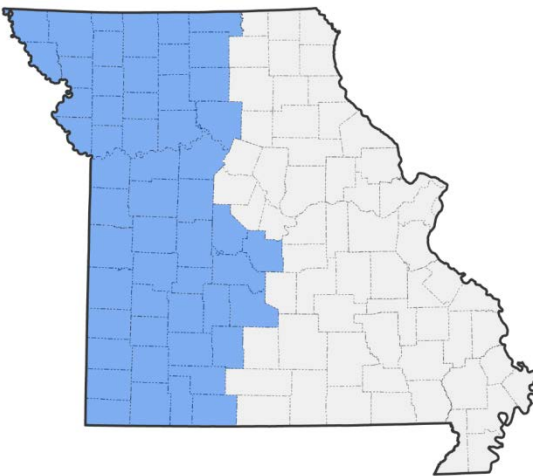
Objective

Develop a fully state funded 2-year cyclic plan for acquiring new state-wide leaf-off 18 inch resolution aerial imagery that meets the standards and specifications as outlined in the State's Photogrammetric Services contract.

The funding requested below should cover a contract for aerial 18 inch resolution leaf-off imagery of the entire state, but it need not all be acquired in one year. The proposed cycle splits the state into two sections with each section flown every other year into the future. This permits the development of a consistent budgeting item over time.

Scope

Using an estimate of \$10 per square mile (a reduced rate from those quoted, but in line with a statewide acquisition price), the total cost of acquiring 18 inch resolution imagery will be approximately \$696,810 (69,681 square miles X \$10). By developing a cyclic program for Missouri, federal, state, and local agencies will be able to align their planned funding to collaborate with this program, ultimately realizing significant cost savings through working together.



The two-year cycle proposed could start in 2015. This option keeps the state within the DHS cycle for the two major urban areas and meets the growing trend for even more current imagery. As well, it would support the real property assessments that occur across the state during odd years.

Under this option the state will need to budget **\$350,000 annually**.

Figure 1: Proposed split of the State for Year 1 and Year 2 acquisition.

Benefits

This program will use established tax assessment and collection processes to provide the potential to identify new construction and improvements more equitably across the state, based on a recurring cycle of new imagery. In the State Tax Commission Annual Reports of 2011 and 2012 a total of \$50,993,941,776 and \$51,194,941,776 was collected from the combined rural and urban residential Assessed Valuations. If we just look at the growth in collections between these years it would equal \$201,693,867. If the investment of \$350,000 annually in the imagery program results in a simple 1% increase in collections due to the detection of new construction or improvements across the state, it has the potential to increase new collections by \$2,016,938, resulting in over a 5 fold return on this simple annual imagery investment.