



STATE OF ARKANSAS
**Department of Finance
and Administration**

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June 17, 2009

Shelby D. Johnson
Geographic Information Coordinator
Arkansas Geographic Information Office
One Capitol Mall 3B201
Little Rock, Arkansas 72201

RE: Opinion No. 20090418

Dear Mr. Jordan:

I am writing in response to your request for an opinion on the following:

My office acts as the functional arm of the Arkansas Geographic Information Systems Board (Act 244 of 2009). Some of our major activities include providing administrative and technical support to the Board. We pursue activities that result in coordinated, cost-effective programs for spatial data development and distribution. In fulfilling this role we coordinate with cities, counties, state, federal governments, and the private sector to reduce the duplication of effort. We coordinate the completion and maintenance of shareable statewide framework data and applications of geographic information system technologies.

It has come to the Board's attention that sales tax on the service of spatial data development and acquisition may not be uniform or clear to cities, counties and state agencies. The Board believes the fees for this type of work is a professional service.

In your opinion, should a city, county, or state agency pay sales tax on the development of spatial data as defined by Arkansas Code 15-21-502(9)?

"Spatial data" means information that identifies the geographic location and characteristics of natural or constructed features and boundaries on the earth. This information may be derived from, among other things, remote sensing, mapping, and surveying technologies;

Additional telephone conversations described with greater specificity the nature of the spatial data development and acquisition. As described, there are two main forms of data that are developed or acquired – Vector data and Raster data. Vector data, also referred to as Points, Lines, and Polygons, consists of extrapolating positional coordinates and identification of

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specific points, lines, or polygons occurring in the geography of a region. It may be acquired through orthoimagery interpretation which is a post-hoc analysis of existing images or data to extrapolate the necessary information. The vector data may also be acquired through field measurement utilizing technologies such as global positioning satellite information.

Raster¹ data consists of an organized grid of information containing cells and values, not unlike a blueprint for the topography and geography of an area. This data may be acquired through image datasets from satellites or from digital orthophotography from aircraft or other small flying craft. The images acquired from this are then orthorectified, or adjusted through a computer program to correct for curvature of the earth, horizon lines, and elevation perspectives, to produce an accurate map. You also describe an additional technique for acquiring usable data:

The technique is generally known as image classification and auto-extraction. This is where a GIS Analyst or Remote Sensing Specialist uses image processing software to classify data based on the image pixel values, and /or colors Red, Green, Blue (RGB) and the shape, texture and contrast of features in the image. Once an image (raster) has been classified the image processing software can automatically extract lines and polygons from the satellite or orthoimage based upon the classification. Unlike "heads up digitizing" the only intervention from the analyst is the classification of the source image for the variables being sought. The rest of the process is automated by the software.

RESPONSE

In response to your request for an opinion, a majority of the data development and acquisition services is exempt from the Arkansas Gross Receipts Tax, but photography of any kind, including digital photography, is a taxable service. As described below, the entire invoice will be subject to the gross receipts tax if charges for photography services are commingled with other services.

Initially, I must note that there is not a blanket exemption from the Arkansas Gross Receipts Tax for "professional services." Rather the "Arkansas Gross Receipts" Tax, also referred to as the "Sales Tax," is generally applicable to the sale of tangible personal property and certain enumerated services. *See* Ark. Code Ann. § 26-52-301 (Repl. 2008). Assuming that the fees you reference are for a service and do not include the provision of tangible property, the development of spatial data as defined must fall within one of the specifically listed taxable services to be subject to the Gross Receipts Tax.

The descriptions of the services required to develop or acquire Vector Data are exempt from tax. There is no analog to the orthoimagery interpretation in the services described in the Gross

¹ You have provided the following definition of "raster" to assist in this opinion: "1. An element of a space that has been subdivided into regular tiles by tessellation. 2. Commonly, a data set, as for an image or DEM, composed of rasters. 3. Often used as a synonym for grid" (Bonham-Carter, 1994, p. 373).

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Receipts Tax statutes and rules. This post-hoc analysis is an analytic service or task that does not fit within the confines of the enumerated taxable services. The taxability of photography services, discussed more fully below with respect to Raster Data, does not apply to analysis and processing of *existing* photography. Simply put, the actions described are far removed from “photography services” in my opinion. While the services may be accurately described as “data processing,” in the technical sense that they process, correlate, or otherwise manipulate data, the reference to “data processing services” in Ark. Gross Receipts Tax Rule GR-10.1 is inapplicable. The Rule does not contemplate the raw data analysis and processing that you have described. The services remain exempt from the Gross Receipts Tax because they are not specifically included as taxable services in either statutes or rules governing the Gross Receipts Tax. The acquisition of raw data through field operations is also exempt from the Gross Receipts Tax. There is, like the orthoimagery interpretation, no analog to this in the existing Gross Receipts standards.

With respect to Raster Data, the photography portion is taxable under Ark Code Ann. § 26-52-301(4) (Repl. 2008) and Ark. Gross Receipts Tax Rules GR-10(B). The Department has previously determined that “photography service, of all kinds,” includes any acquisition and immediate processing of an image on a light-sensitive receptor either through an analog film component or a digital sensor component. The charges for the photography services, such as those described using a aircraft to photograph the area to be classified, are therefore subject to the Gross Receipts Tax.

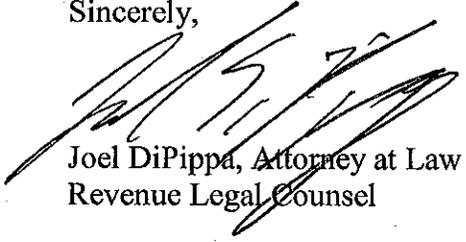
The remainder of the services, the orthorectifying of the data and auto-extraction techniques for example, is exempt from tax. Once existing photography is being analyzed for the necessary data, there is no taxable service being performed. Similar to my analysis of the Vector Data processing above, the “data processing” mentioned in Ark. Gross Receipts Tax Rule GR-10.1 does not encompass raw data computations or mathematical corrections to the spatial coordinate designations. Furthermore, these services are not analogous to other photography services referenced in Ark. Gross Receipts Tax Rule GR-10(B). Except for the photography services being provided, the services in acquiring and analyzing geospatial information are not subject to the Arkansas Gross Receipts Tax because they are not a specifically enumerated taxable service.

Because photography services of all kinds, including digital photography, are taxable, nondifferentiated billing that commingles photography services with other items will be subject to the Gross Receipts tax in its entirety. *See, e.g.,* Ark. Gross Receipts Tax Rule GR-3(H). Charges for the photography services need to be separately stated and taxed on an invoice otherwise the entire amount of the invoice that includes the photography services will be subject to tax.

This opinion is based on my understanding of the facts as set out in your inquiry and as current Arkansas laws and rules govern those facts. Any changes in the facts or the law could result in a different opinion.

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Sincerely,



Joel DiPippa, Attorney at Law
Revenue Legal Counsel