

E IMPLEMENTING AUTOMATIC GEOGRAPHIC REFERENCING IN UTAH

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It was very interesting listening to the previous speakers. I wonder, with the State of Alaska and the State of Montana and the State of Utah, what percentage of total Federal landholding is represented there. We are here at a Federal conference representing the state and yet we are also representing a good hunk of the Federal investment as well.

I have been most impressed with what has been said here this morning. I am hearing some very interesting and exciting phrases being used. Phrases such as "integration of multiple data types", not just remote sensing data, but all kinds of data. Statements about technology transfer and the phasing out of technology transfer. Now that may sound a little bit strange, but as the federal government recognizes that its technology must be transferred to the next level of state government, whether the question of timing is right, that is something else. But state government must look at technology transfer. In other words, the state government cannot accept or pick up the gauntlet and be the expert now. It must be moved out to the operational aspects of state government, to the conservation officer in the field, to the geologist in the field, to the law enforcement officer in the field. It must be moved to local government. When we talk of technology transfer, we have just started. Technology transfer, that NASA began, and evidently, with recent developments, we are starting to see the closing moments of, this is just a beginning. What is being done must be moved out to where the operational aspects can take place and utilize those aspects in the hands of the individual.

This is the approach and activity of the State of Utah. We are not as far advanced in the actual application of remote sensing, the application of the new technology, as some state are. Listening to the gentleman from the State of California this morning - tremendous things they are doing. They are doing the things that Utah is now contemplating. Utah is ahead of some states. We are behind a larger number than we would like to be. However, we are moving and I think we are moving in the right direction.

Utah is trying to take a fully integrated approach. You heard terms this morning concerning data bases. You heard terms concerning coordination and computer capacity. This is an overall view of what we are talking about accomplishing. The total picture must be considered. Just as the federal government looked at the whole picture, so must

state government. We cannot just consider remote sensing alone. Remote sensing is an extremely valuable tool, but unless integrated and properly utilized, it is not going to be of any great value.

As we look at all aspects, let me explain to you a little bit about why I am in this field and doing what I am doing. I am not an earth scientist. I am not a remote sensing expert. What I am, is an individual who has fought for many years to integrate data, to view data as a valuable resource. To view data and information as a resource to be managed. To be managed in much the same manner as you manage your personnel departments, as your finance departments manage the dollars, as your computer scientists manage your computer capacity, so must information be managed and coordinated and integrated.

One of the major problems we face in looking at the true operational aspects of what is going on, we see the geologists in the field taking core samples, measuring faults, doing, (as I say, I am not an earth scientist), but doing what geologists do. Or the property assessment valuator, who is in the field putting values on property, or the Department of Transportation that is studying the feasibility of a major communications corridor. What are they doing? They are gathering data. They are gathering data that to them, becomes information because they are going to put it to specific use. But can that data then be used and become information to someone else? Can the data that is gathered in a remote sensing application, be valuable to a highway department for corridor analysis? Can the same information, the same data, that is used to study slopes and fuels in a forestry application for fire prevention. Can the same data be used by the Department of Transportation for corridor analysis? Or by the Taxation Department for property valuation? Or the Geological & Minerals Survey Department for earthquake hazard evaluation? Can this be done? Can we share the common data and mould it to make it information for each of our needs?

The State of Montana for instance, discovered that there are a lot of common needs. The key issue here though, is the question of common needs as determined from about or the common needs as defined by the individual, by the user, by the man in the field that is going to make things happen.

This leads us to what I really want to say today and explain to you what the State of Utah is trying to do. We are trying to establish a core operation within the state to make some upfront investment in hardware, software, technical expertise, not sufficient to do the job, not sufficient to make it all happen, but sufficient to make the people, the operational people, in the field, aware of what can be done. It

will be their decision when remote sensing or integrated geographical referencing takes place. Decisions based on their needs, not on a need dictated by someone at a central site, the whims of a legislative body. But based on their needs that they are willing to go out and fight for and to make it happen. That is what it all amounts to. The term technology transfer is an excellent term because it has to be continued until that transfer is all the way down to the operational people at the base level who are making it happen.

The State of Utah is progressing with a slow, small approach. The key to our operation is to facilitate, to coordinate and to educate. The word "do" does not exist. We will not "do it" for the agencies. The agencies must do it for themselves based on their needs, their desires, their capabilities and their payback.

I do not have anything else to say. I think the point I wanted to make here is that the State of Utah does not want to go into it in a large way and try and do it. We want to continue the trend of NASA in the technology transfer concepts and continue that transfer down the line until it gets down to the working level.