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Securing Multi-Agency Participation in the Development of the New Orleans Geographic Base File

LEROY D. DAUTERIVE AND ALBERT C. ETIENNE

LEROY D. DAUTERIVE

The topic of discussion is "Securing Multi-Agency Participation in the Development of Geographic Base File in the New Orleans, Louisiana Region." This is primarily a joint effort being undertaken through the Regional Planning Commission, local parish planning agencies, and the New Orleans Police Department in an effort to reduce the cost to any one agency. Also, this joint effort was undertaken to take advantage of the capabilities and resources of each agency. Specifically, the New Orleans Police Department has a very good computer programming department, with very highly skilled people. The Regional Planning Commission, on the other hand, does not have a computer programming section, but it does have the map review and editing resources which the Police Department does not have. In this type of situation we have been able to work together very effectively.

When Mr. Etienne and I were asked to share with you our experiences in developing the geographic base file for the New Orleans area, we were somewhat surprised. The way we are developing the geographic base file is anything but an exemplary model for other areas to follow. The process that we are following is in a word "tacky." It is held together with bits of "time and materials" taken from a number of agencies to create the products needed to form the geographic base file.

At one time or another, we have borrowed staff and material from local city planning agencies, private utility companies, the U.S. Post Office, the Alcoholic Driver Control Program, the New Orleans Police Department, the Jefferson Parish Sheriff's Department, the Regional Planning Commission summer staff, local public libraries, health planning agencies, local universities, the National Aeronautics and Space Administration, city and parish building regulations department, and the finance and data processing facilities of Jefferson and New Orleans Parishes.

To date we have financed the building of the geographic base file with funds from the Department of Housing and Urban Development, the Law Enforcement Assistance Administration, the Department of Transportation, local city and parish governments, and the State of Louisiana.

Before going any further into what we are doing to develop the geographic base file, let me give you a brief outline of the New Orleans area planning process. The New Orleans SMSA is composed of four county-type areas which are called parishes. These four parishes are named Jefferson, Orleans, St. Bernard, and St. Tammany. Since the bound-

aries of the Parish of Orleans are the same as those of the city of New Orleans, the two terms are used interchangeably to describe the city of New Orleans. The total population of the SMSA is slightly over one million people, with approximately 55 percent living in Orleans Parish, 35 percent living in Jefferson Parish, and the remaining 10 percent split equally between St. Bernard and St. Tammany Parishes.

Until the 1950's over 70 percent of the region's population lived in Orleans Parish. As cheaper land became available for home building, in the parishes of Jefferson and St. Bernard, large numbers of families moved annually to Jefferson and St. Bernard. Today almost one-half of the region's population lives outside of Orleans Parish.

In 1962, the Regional Planning Commission for the New Orleans area was founded. Although it was founded in 1962, the Regional Planning Program did not get underway until 1967. One of the first components of the regional plan identified for special attention was the development of an easily updatable data base.

In 1968, the address coding guide for the metropolitan New Orleans area was developed. Also in 1968, the Regional Planning Commission began to explore the establishment of a regional 7.3-acre grid system for identifying and displaying regional data. After much study, this grid system has been put aside for two reasons; number one, the local planning agencies collect and need data by block and parcel identification, not on a 7.3-acre grid basis, and number two, converting field data to the grid identification system involves a costly, duplicative process. We would need to have the geographic base file in operation plus a conversion file to get data identified by the proper 7.3-acre grid.

We are focusing our effort on developing and maintaining the geographic base file for two reasons. First, planning data needed by the Regional Planning Commission and local planning agencies is compiled by municipal address which is a good common denominator. Second, no elaborate changes in the present data-collection process are necessary if the geographic base file is used. If any of you have gone out in the field, you know what happens when you talk to the building inspectors and ask, "If you could just change the way you collect your data just a little bit." And he says, "Not me, not me, I've got union rules to contend with." There are so many obstacles to changing the methods of data collection that the fewer changes you have to make in the primary data collection the easier the process is.

Because the geographic base file is geared to use address information, we have a natural basis for agreement with data-collecting agencies. We don't have to ask them to change anything, or relatively little.

At this point, I would like to tell you briefly what has been accomplished to date in the New Orleans area. First, an address coding guide reflecting the 1968 metropolitan street pattern to which the DIME features have been added has been completed utilizing Department of Housing and Urban Development funds. Second, the New Orleans Police Department under a Law Enforcement Assistance Administration grant has edited and made corrections to be used successfully to sort employment data to traffic zones by the University of New Orleans as part of the Unified Transportation Planning Work Program for the New Orleans area. Fourth, over 25 informational presentations have been made to private and public agencies and groups who might be assisted by the geographic base file. Agencies and groups contacted included local school boards, Chamber of Commerce research personnel, housing finance groups, telephone company forecasters, local banking representatives, health planning staffs, and law enforcement department personnel, to name a few. Fifth, backing for the geographic base file development has been secured from each parish's planning agency. Sixth, funds have been secured from to update the geographic base file during fiscal year 1975 from the Department of Housing and Urban Development. We have gone out and done the things that were necessary to acquaint the people with what the geographic base file is all about.

To obtain multiagency participation in the regional development of the geographic base file, we have, based upon our experience, formulated an approach to secure each agency's assistance. This approach is based upon the premise that the priorities of the day-to-day operations of government and private agencies will override any serious attempt to set up a better way of completing a job, if the better way hampers the day-to-day operations. With this thought in mind, it was decided to sandwich in, as best could be done, the completion of the various pieces of information needed to update and maintain a functional geographic base file for the New Orleans area as part of the various agencies ongoing programs.

The present "piecemeal" effort focuses on first getting Orleans Parish operational; then going into Jefferson Parish, which is the second largest parish; and then tackling the two suburban-type smaller parishes. This approach, admittedly, is more costly and more time consuming, but faced with the impossible task of securing sufficient funds in any one year it is felt to be the most sensible approach for our area.

To carry out this approach, we have employed the following rules when soliciting an agency's support. One, when you approach the head of an agency and try to sell him on participating in the development of the GBF, you might have about 5 or 10 minutes, so you want to get in there and keep the approach as simple as possible. Number two, you want to keep it practical. You are not trying to come up with some blue-sky ideas about what can be done

with this system. You want to keep it right down to where the agency head can relate to you. The third thing is, you want to keep it pertinent in terms of what it will do for his agency.

In keeping it simple, we sell one goal. We are not trying to develop a data bank; we are trying to develop a standardized tool for data manipulation. In keeping it simple, we only ask for what we need, not what we might like to have. In keeping it simple, we don't go into elaborate detail. And most important, in keeping it simple, we ask for only that product which an agency can produce as part of its day-to-day operations.

In keeping our approach practical, we try to make the work sequential to avoid going over the same ground twice. We sell the geographic base file on the basis that it is the key to developing a data-flow system at the least cost per agency.

In making our solicitations pertinent, we approach public and private agencies to determine if the geographic base file can (1) save them money, (2) save them time, (3) provide them more accuracy and (4) make them better able to respond to the problems in their respective agencies. If any of these four points can be determined as applicable, particularly if the geographic base file can save money, we are then able to more effectively solicit the agency's support. When these points were not applicable or have not been applicable, but the agency needs information, we proceed to pay for the product needed. If we don't have anything to trade, we have to find the dollars.

At this point, the question you may be asking is, "How are you going to set up the geographic base file for the New Orleans area?" The geographic base file will be made fully operational using the following approach. The updating of the metropolitan map series will be accomplished by the Regional Planning Commission and the local planning agencies in concert with the Census Bureau—street changes, new address ranges, node numbers, and new census block numbers. The coding of the updated map information in order to insert these changes into the file will be accomplished by the Regional Planning Commission in concert with the local parish Finance and Data Processing Departments. The actual insertion of the changes in the geographic base file will be accomplished by the New Orleans Police Department with support from the Regional Planning Commission.

Once the geographic base file has been updated it will be employed by the Regional Planning Commission.

The New Orleans Police Department has satisfied the respective agencies, needs during 1974 and transmitted the GBF in its present stage to other participating agencies.

In closing, I would like to emphasize that the approach we are using in the New Orleans area to convince many agencies to jointly participate in the development of the geographic base file is sound. While this process may try the patience of many, we feel that it is the best way to realize geographic base file development when Federal, State and community resources are limited. The longest journey can be accomplished one step at a time.

ALBERT ETIENNE

We in New Orleans have transferred the LOCUS system from Long Beach, Calif. It is basically a geographic base file, developed from DIME, with the extension on records of intersection information. I have done a file create on a test file, and we have that portion of it completed. One gentleman over here was talking about an intersection

record which does create intersection records for you, I have also developed a couple of programs which might be helpful in the correction of DIME. I took the logic of the ADDEDIT program and did a segment link system which can list a file by feature name and node number sequence to make map review a lot easier. I have also a small system that will add things like traffic zone and ZIP code and mass corrections to the file.

Question Period

Mr. Ma—I am really amazed how you can coordinate all these agencies to be involved in the geographic base file. Can you elaborate a little further? How can you pool them all together? That was one of our biggest frustrations.

Mr. Dauterive—Who's coordinating? What we are trying to do is coordinate. When you go to an agency, you have got to know what you want. The only way to really coordinate the whole process is to do two things: Number one, set up a sequence of products that you need, and number two, divide the products needed among appropriate agencies.

We divided the products into two areas. The first area is the mapping work that has to be done, and the second area is all the computer work that has to be done.

In setting up coordination, I guess it would be better described as stealing "time and material," from different agencies. You look at what the agency is producing first, then go back to your office and determine where the products fit in terms of what you need. If it is not exactly what you need, you don't go back; but if it is exactly what you need or if it can be made into exactly what you need, then you go back and approach the agency.

That's when you find out if you can realize those four points that I mentioned previously: Can you save them money with the geographic base file, can you save them time, make their work more accurate, etc? If you can realize any of those four points then you go in and you say to the agency head, "I can give you a trade. If you produce just one little piece of data in this form for me, then I will give you this complete geographic base file. I'll just hand it to you, and it will be free, because you are producing this data anyway."

On the other hand, if the agency does not get anything out of the geographic base file, then you sit down and say, "I need this piece of information from you. How much will it cost me?" Once you have that price determined, you can look around for HUD funds or LEAA funds, or go to the city government and see if you can get the dollars necessary to buy that piece of information.

That is essentially what we try to do. To coordinate successfully you have to break the program down into the subparts that you need.

The map work, for example, has been broken down. If you look at the four basic mapping products needed, you need to update the Metropolitan Map Series; you then need

that map enlarged (that is what we are going to do, enlarge it to 1"=400' scale); have someone put address ranges on the enlarged map and then prepare another overlay and put node numbers on it, which is the third part; the fourth part is to add the census block numbers. If you can get four agencies to do these four pieces in sequence then you have got it.

Mr. Hearle—How about these applications that you are going to hang on the GBF?

Mr. Dauterive—Let me tell you what we try not to do. We're kind of strange people, people who fool around with data—it's like the somewhat corny, but applicable joke. One man comes up to another and says, "Hey, everybody thinks that I am kind of strange because I like pancakes." The other man says, "Oh, you do? Why don't you come over with me? I have a whole drawer full." That is the way we get with data. You can like pancakes, but you don't go overboard. It's the same way we are doing with GBF program. We are not trying to sell elaborate data tools and elaborate information systems. We are trying to sell one thing—the GBF system and program, and we are trying to keep it simple. We are trying to say if you have this one thing, this one tool, then you could do many, many more things. We are not trying to tell you what you could do. If you think about it, however, there is one thing that you do need; you need this common denominator; you need the geographic base file.

That is all we are trying to sell, so we don't get directly into the use of data. All we are trying to do right now is to get that one piece, that common denominator, up and running. Once we do that, once we can show some products, then we can go into some graphic displays. We will then be able to get into what I call the more sophisticated data analysis.

Mr. Kondo—As I understand it, most of the agencies you work with are in the city of New Orleans. Have you had any contact with agencies with operate in a different jurisdiction than a city such as a State agency?

Mr. Dauterive—We have utilized primarily the city of New Orleans personnel, but we also have gotten support from the University of New Orleans, which is multiparish. We have gotten assistance from the computer services of the National Aeronautics and Space Administration, which is in the Slidell area of St. Tammany Parish. We have utilized address information collected by the Department of Roads and

Bridges in Jefferson Parish where they record the addresses of all the streets they have under maintenance. While we are using primarily New Orleans agencies, we are not limited. The point is that we are trying to get to the agencies that have data.

In going to other agencies, the hardest job is finding out what there is they have that can be used. For example, we never realized that the Roads and Bridges Department had a set of maps with address ranges on it, until we went out there and happened to see them, and the only way we found that out is by going out and telling them the "GBF story." And once you tell your story and see what they have, you go back to the "drawing board" and say, "Is that agency going to be able to contribute to the program?"

Mr. Molski—I have a problem with the economies of scale. We are developing a GBF/DIME for the entire county, but the largest city in the county has a population of 55,000. I am wondering if you have had any experience with trying to approach a smaller city, such as that of 20,000 people; for instance approaching the police department, or the fire department in trying to streamline their operations with the use of a GBF? In other words is there a cut-off point to which the DIME file applies?

Mr. Dauterive—The economy of scale lies in the regional basis. Being the project manager, responsible to set up the address coding guide in 1968, I had 25 people working for me. They were sort of moving me around in about four different places: one in Jefferson Parish on the West Bank, one in Jefferson Parish on the East Bank, one in the city of New Orleans and one in St. Bernard Parish.

The economy of scale came in using the same people who became very skilled at what they were doing to develop the information, the address coding guide and the DIME information. I think that setting up for a small town is more

of a problem because 50 percent of the problem in training the people to be accurate or getting an accurate crew to do the job. So I think if you are going to approach the problem of setting up the GBF you should approach it on a regional basis.

Go into the local municipality of about 20,000. Solicit their support and solicit their participation, but do it on the basis that "Here is something I am going to do for you as part of your participation in the regional process." Don't approach them on the point that they should do this for their city only. I do not think it is going to work nor could it be done that way.

Mr. Weaver—I have more of a comment that a question. What I have heard in this presentation is excellent. It really boils down to selling the user on the benefits that the GBF has to offer, and I think you have summarized beautifully how we could go about selling the benefits of the GBF; you have to do that for this ongoing cooperation, funding, etc., so congratulations in that area.

Mr. Etienne—In the very beginning we would go to a place and give them the pitch about DIME, ask them for clerks. The people would tell us, "It is a beautiful idea; when you get it running, come back and we will use it." As we struggled along by ourselves, just Mr. Dauterive and I mostly doing all of the work, borrowing a clerk here, doing something there, the closer it got to being complete, the more and more people were willing to give us two clerks for 10 days so that they could use it.

In the beginning it was a very hard row to hoe; everybody thought it was a good idea, but nobody wanted to invest anything in it. But then when it got close to being usable, the people were more willing to invest time or personnel as opposed to dollars. We usually did not ask for money, we asked for bodies.

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