# Carolina Population Center

In 1966, the Carolina Population Center was founded at the University of North Carolina at Chapel Hill. To celebrate its 40th anniversary in 2006, a project was conducted to document the history of the Center. This transcript is an excerpt from an oral history interview.

Interviewee: Ronald R. Rindfuss
Interview conducted by: Grace Camblos
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*Ronald R. Rindfuss was CPC Director from 1992 – 1997, and has been a CPC Fellow since 1977.*

RR:    We were the first Center that had a Spatial Analysis Core. We were also the first Center that had a Statistical Core, which Dick Udry initiated, and lots of other centers followed. How'd the spatial core come about? It…I'm going to tell the story from my perspective, and other people might have different perspectives. Some, sort of the thing that got me started was we were doing research in Thailand. And we had to map some things. And what we wound up doing was, a very talented graduate student was doing this by hand. And then early on, one of the things I did was to meet with, and often times had lunch with departmental chairs, and I had lunch with John Florin, who was then chair of Geography, and who was also a fellow at the Center at the time. And I don't remember how it came up, but he started telling me about all the breakthroughs that had happened within the field of geography, in terms of computerizing cartographic processes, in terms of bringing in, being able to merge in remotely sensed data with data that is more of a map-like source, how these could be layered. And the first thing I thought of was, "Oh, we don't have to have this graduate student do it by hand." And in geography, he said that Steve Walsh, who is now a fellow of the Center, was a person who had lots of these talents, and he ran a lab within Geography. So the…again, I don't remember the exact details, but the Thai project I was working on was with Barbara Entwisle. And so the two of us met with Steve, and we talked. And the first thing that happened was that the three of us submitted one or more proposals to do some joint work using our Thai data. And then it became clear, after having a number of meetings with Steve, and we'd say, "Boy, it'd be nice to be able to X, Y, or Z." And he'd say, "Oh, we can do that. Here's how it's done." Or we'd be struggling with something, and Steve would say, "Oh, no, you can do it this way." And Barbara and I would look at him and say, "You can do that?" It was clear that we were able to, in our own research, do some, push forward in ways that we had not been able without Steve's help.

Initially we had Steve, and then one full time person. Oh, I left out an important piece of this story. And it's a piece of how sometimes you just get lucky. We figured that it would make sense to actually get the spatial unit up and running before we had the money from NIH. And so I went to Garland Hershey, who was then Vice Chancellor for Health Affairs, who I reported to, and said, "Look, this is what I'd like to do. Can you give me a little bit of seed money? I

need to buy some equipment, I need to hire someone, and see if we can get it running for…" I forget the term, maybe it was a year, or six months, whatever. So that we had some products to show the site visit team when they came. And it turns out he's a map person. He loves maps. He pulled out an atlas. And so he was enthusiastic about the idea, and he gave us the seed money. And we'll never know whether we could have gotten it without the seed money. But it certainly helped. At the site visit, our Thai project, and I forget, there were one or two other projects that had started using spatial core. And so you had faculty members that could say, "This is what I'm able to do that I wasn't able to do previously."

GC:    What kind of things were they able to do that they couldn't before?

RR:    Basically, join different kinds of data. If you think of - if you know the location of a place, longitude, latitude, or whatever system you're using - if you have data that's place specific, you can join those kinds of data. So you could take a bunch of aerial photographs, satellite images, maps, and join them. As long as you know the longitude and latitude, or whatever system you're using. And so it allowed people to join data. What lots of people started doing was using the Global Positioning System, which is a series of I want to say 24 satellites - but if you interview Steve Walsh, he'll give you the right number - that circle the earth. And with a GPS device, you can find out where you are. And so a lot of our faculty started using these GPS devices in their survey research. So you can GPS the location of where a respondent lives, for example. You can then join that data with any other spatial coverage. So you can describe the territory, if you will, surrounding your respondent. You can join it up with highway data if you want to think about commutes, or whatever. You can join it up with data in terms of parks that are available, recreational facilities, whether there are sidewalks. So you can have a sense of whether people are in a position where they might be walking to a store, to a school, or whatever, or getting in their car. One of our researchers, several of our researchers are doing that in thinking about obesity. You could look at land cover change in rural areas, which we're doing in Thailand, another group's doing in Ecuador. So you can use the satellite data. What else can you do? You can map out your results from statistical projects. You can see where you're fitting data well, and where you're not, and look at it, and say, "Oh, well we forgot about this possibility, or that possibility." And it allows you to bring in various kinds of contextual data, so you know more about the context where someone lives. We're now looking at space-specific social network data. For example, we know the location of the dwelling units of all the households in our 51 villages in Thailand. Within that, we're looking at the social networks. Are you more likely, is your daughter more likely to live next door than some distal point within the village. So I mean there's just, it's our imagination that's holding us back from all the kinds of things that one can do.