

# The Historical Value of Time as a Concept of Change

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Inquiry to Herman Goldstein<sup>1</sup> (author of Community Problem Oriented Policing), “*What is your recommendation on the early work of individuals who initiated foundational concepts that later were transformational to the field of policing?*” From that question, his philosophy and a list of “must read” books emerged, works that established the pathway to accepted practice.

In the mid-1990s, the Charlotte-Mecklenburg Police Department (CMPD) in partnership with the University of North Carolina at Charlotte, Department of Criminal Justice, submitted and received a \$3.2 million dollar grant from the Department of Justice (DOJ), Office of Community Oriented Policing Services (COPS) to establish the Carolinas Institute of Community Policing (CICP). The basic tenets of the multi-year funded program were to deliver community oriented policing training and requisite consulting services to police and sheriffs in North and South Carolina. The anchoring component was the utilization of Geographic Information Systems (GIS) to analyze crime and corresponding data, conduct temporal and spatial analysis of places which were of concern to police and the related community. The residents and neighborhoods became the unit of analysis. Neighborhoods were self-identified, had established boundaries, acquired citizen identifiers and worked well for the applied research project uses. The formation of police, community citizens, and stakeholder partnerships were attached to a list of quality-of-life indicators, with crime, violence and disorder reduction a primary goal.

**Geographic Information Systems bring data, analysis, and people together sharing the same information allowing them to engage in sustainable problem-solving**

The Charlotte-Mecklenburg Police Department and the University of North Carolina at Charlotte, along with other partners, received funding totaling \$3.2 million dollars over a five-year period. The specialty emphasis of our project was to establish a GIS Unit that would provide services to the City of Charlotte and train others from police and sheriffs across North and South Carolina. This proposed program included community policing services consisting of training, education, community level assessment, program development and evaluation. Other requests from police and sheriff agencies received attention as they became known. Additionally, we offered national training that was well

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<sup>1</sup> Goldstein, Herman. (1990). Problem Oriented Policing. New York, NY. McGraw-Hill.

attended. Emerging from this initial focus was a plethora of programs at Federal, State, County, and local police.

The first six-years-plus life of the COPS-funded Carolinas Institute of Community Policing focused on the application of GIS to assist officers and citizens' addresses identified problems and seek sustainable solutions. Successful programs ultimately elevated the interest and applications of GIS across the country. We had support from ESRI; UNCC Geography Department and others in building a robust system of change to the traditional practices of policing. We were not unique, but we were determining a variety of GIS applications, conducting research, providing training, and sharpening how police officers and citizens worked symbiotically to improve community quality of life. It was community problem-oriented policing at its best!

In reviewing the present day use of Geographic Information Systems (GIS) to include mapping of everything touched by humans, an extensive and often sophisticated list. GIS allows consideration of changes in decision-making and subsequent planning. See: [www.esri.com/what-is-gis](http://www.esri.com/what-is-gis)

Use of GIS analysis had positive outcome results on crime, violence, disorder and other related police initiatives. This tool substantially elevates the utility and application leading to a more informed, effective, efficient and time-saving police department. Reducing repeat offenses and incidents, preventing longstanding problems from reoccurring, and the cooperative working partnerships of police, citizens, and other stakeholders was the ultimate goal of the COPS Office. With CICIP assistance, GIS matured into a core unit within CMPD. Patrol officers, supervisors, investigators, administrators and citizens used these services to examine issues and determine sustainable solutions. It was possible because data was collected, drilled down to bedrock for greater understanding, and then used to develop responses with the goal of "no return" solutions. Moreover, during that period, consideration of the effectiveness of outcomes was prominent, evaluation of applied solutions quickly identified where improvement was needed.

Current use includes crime, terrorism-related data mapping, crime hot spots, locations of persistent problems, detailed data analysis leading to a depth of knowledge often not considered early in the process. Police officers at CMPD, during the CICIP period, became the central focus, and they excelled in their work directly with citizens, identifying problems, seeking GIS Analyst assistance and working through the steps of Goldstein's SARA Model. SARA is scanning, analysis, response and assessment of a problem, each step critical to the outcomes achieved.

The list and creativity of how GIS has changed policing, business, and the government is substantial.

See: [http://webhelp.esri.com/ARCGISDESKTOP/9.3/index.cfm?TopicName=Common\\_types\\_of\\_GIS\\_map\\_applications](http://webhelp.esri.com/ARCGISDESKTOP/9.3/index.cfm?TopicName=Common_types_of_GIS_map_applications)

**From the Past Forward: A Case Example from Charlotte**

The Charlotte-Mecklenburg Police Department (CMPD) was not the first to use the concept of data analysis and Geographic Information Systems software (GIS) to identify places where crime and disorder were high. Locating places and people that generate numerous calls to the police necessitates action to find sustainable solutions preventing future occurrence. Close collaboration with the community and patrol officers improves resolution to the identified problems. An extraordinary combination of factors allows me to speak of the unique individuals in the GIS Analysis unit, its mission, and goals, and the larger community problem-oriented policing model, a partnership between citizens and police. Results of this early work remain in place across the nation are illustrated by the numerous people working in this field. The path from concept to funding and application included the following highlights:

1. With the 1993 merger of the City of Charlotte Police and the Mecklenburg County Police, creating the Charlotte-Mecklenburg Police Department and implementation of a new service model. Dennis Nowicki, hired as Chief of Police, initiated substantive change shifting from traditional to Community Problem-Oriented Policing (CPOP). It represented a progressive change involving in-depth training, educating the public, elected officials, citizens, police officers and stakeholders. Steady conversion of philosophy, practice and application were the keys to successful conversion. Acceptance by police officers and community members was a central consideration that received substantial attention. Emerging from that early vision was a police department where officers and community members focused on enhancing the quality-of-life for all people while engaging in fully integrated collaborative partnerships.

Today's Charlotte-Mecklenburg Police Department is responsible for 809,580 citizens living within 438 square miles. The department has 1717 sworn officers and 564 civilian personnel, operating under a budget of \$201.6 million dollars.

2. In 1995, Chief Dennis Nowicki negotiated an agreement between the CMPD and the University of North Carolina at Charlotte (UNCC), to include onsite services of a University Associate Professor from the Department of Criminal Justice. This link provided pathways for additional faculty to bring their expertise to the table to include Political Science, Geography, Criminal Justice, Business Management, and others. A place to seek technical assistance, conduct research and engage in other innovative ideas. Was this the first centralized full-time partnership? It is not precisely known, but the full-time availability was certainly unique during that period. Subsequently, others have stepped into the breach and claim uniqueness as well.

3. Re-engineering of two separate police units, Crime Analysis and Planning into a new Bureau of Research, Planning and Analysis to include the addition of a GIS Unit, brought people together in the new CPOP model.

4. Approval of the GIS Unit resulted in hiring the first GIS manager to oversee staff additions, program development, establishing other police functions of liaison, and seamless application of COPS Office funding to this central service. A superb staff stepped to the plate, and the transformation remains firm to this day. Many GIS staff went on to advanced careers with ESRI, University teaching, and other venues.

5. Database development was a priority and the integration of this Unit within the department, with a focus on assisting officers, community members, and stakeholders firmly established. The seamless merging of services, data, analysis and the inclusion of public and private stakeholders was unparalleled at that time. This cohesive group was dedicated to enhancing community problem-oriented policing and community quality-of-life for all citizens.

6. The early concept led to a unique arrangement between the City of Charlotte, the UNCC Department of Criminal Justice, and the Charlotte-Mecklenburg Police Department. This partnership opened an inquiry, program development, research and other reciprocal projects that were to the benefit of the City, the University and most importantly the citizens and stakeholders of the City of Charlotte.

**Note:** See: Crime Mapping: Charlotte-Mecklenburg, NC,

[http://www.ci.charlotte.nc.us/cipolice/Police\\_Departmentspab/gis/cmpd\\_gis.htm](http://www.ci.charlotte.nc.us/cipolice/Police_Departmentspab/gis/cmpd_gis.htm)

Like the famous, “*Back to the Future*” movie indicated, events of the past are motivators and contributors to the present. Had not the City and County police merger occurred, the hiring of Chief Nowicki, the agreement with the University of North Carolina at Charlotte to engage as a partner, and receipt of the COPS Office grant funding; none of this would have taken place. However, it did and the years since this early beginning have witnessed a substantial change in the utilization of GIS, community problem-solving efforts by police and citizen partnerships, and a host of new discoveries that are truly phenomenal.

What are the lessons from this grand experiment, the reality of breaking tradition, of challenging custom, tradition, and practice by creating an improved model in place today? Highlights of change include:

1. The merger of two separate police departments that shared similar jurisdiction and geographic areas enhancing effectiveness and efficiency.
2. Hiring a visionary police chief with knowledge of GIS technology, practices, community problem-oriented policing and, importantly, the fortitude to effect change, resulted in significant dividends.
3. Support from the City of Charlotte and County of Mecklenburg to allow transformation to occur. Often political considerations cloud sustainable change that achieves original goals. There were no inhibitors in this case in this example.
4. A collaborative partnership established between the City of Charlotte, The Charlotte-Mecklenburg Police Department and the University of North Carolina at Charlotte, creating a bridge to collaboration and mutual interest fulfillment.
5. The appointment of an Associate Professor who retained teaching and research duties at the University. University teaching, research, scholarship and

community/profession service continued under this arrangement. Included was CMPD's Director of the Research, Planning and Analysis Bureau. In this venue, there was an extended liaison mission with faculty and researchers. Principal Investigator of the Carolinas Institute for Community Policing (CICP) COPS grant project. Also, organizing program/project development and evaluation across North and South Carolina police and sheriff departments as a service of the CICP.

6. The merger of CMPD's Planning Unit and Crime Analysis into Research, Planning and Analysis Bureau. The merger included GIS Analysis, policy development, crime analysis, program development and evaluation, liaison with researchers, and several training and development duties on CPOP, both within the department and community groups.

7. Adding GIS Analysts to the new Research, Planning and Analysis Bureau. The GIS Analysts were central to the formation and operations of this Unit. A technology partnership with ESRI enhanced the start-up and continued operations of RP&A. ESRI, in its words, "*A geographic information system (GIS) lets us visualize, question, analyze, and interpret data to understand relationships, patterns, and trends.*" As transformation indicates, the GIS Unit at CMPD was one of the driving forces to change, and over time endorsed by members from all sections of the agency.

8. Acquisition of Department of Justice, Office of Community Oriented Policing Services funds that established the Carolinas Institute of Community Policing (CICP).

9. Training police and sheriff staff across North and South Carolina in GIS. These instances are community policing, leadership development, GIS and other related topics. In this program, we often conducted an analysis of department and community awareness of COP, needs, and issues addressed through training and technical assistance.

10. Established two GIS labs, one in Charlotte at Pfeiffer University and in South Carolina at the University of South Carolina, Department of Criminal Justice. The staff of CMPD GIS Unit conducted training at both labs.

11. Offered GIS training to police across the United States. This training was the impetus to many emerging innovative new programs. Training took place in the City of Charlotte, at police and sheriff departments, and the two GIS labs at Pfeiffer University and the University of South Carolina at Columbia. Also, GIS staff presented at major criminal justice and GIS conferences raising awareness of our program and emerging products.

12. The conversion of CMPD from traditional police to Community Problem Oriented Policing (CPOP). Enforcement including arrests continued as stated by law and duty. The addition of community and police partnerships added a close and cooperative effort to identify persistent crime, disorder, and fear creating incidents, the collection and the examination of data to provide information to develop sustainable solutions.

This partnership went far beyond cursory discussion to the emergence of neighborhood meetings, led by members of that community with police and other stakeholders present and participating as equal partners. The CPOP meetings eliminated fear, suspicion, diminished communications, accusation and refusal to listen to others. First names, handshakes, sharing personal stories and down to a business objective examination of existing problems, brought people together to work on sustainable solutions.

13. Strategies to create a community-wide partnership that would collaborate to improve the quality of life for all individuals. Full community collaboration is illustrated by the following example:



A police officer, whose patrol district included a public housing complex, identified the need to help young school children learn to use computers, to access sources of information, and to become literate in this emerging learning enhancement. Through personal effort and assistance of others, she obtained a vacant apartment from the Charlotte Housing Authority (CHA). Charlotte business and government provided computers for the computer lab; the local cable provider provided Internet connections, and supplies, furniture, and other lab needs were donated creating a functional network environment ideally suited for teaching. Volunteer teachers were police officers, school teachers, and from the business community. All volunteered their time.

A side note, when the children were at school, mothers from this CHA site asked if they too could be trained on computers and available information sources. Moreover, perhaps of most significant benefit, local gang members request for training was unexpected but nevertheless made. A social change motivator not previously encountered.

14. Extensive training of sworn and civilians in Charlotte in the utilization of GIS to assist in problem-solving and arriving at sustainable solutions to crime, violence, social disorder and improving the quality of life. A GIS Analyst would attend police district and community meetings, bringing the power of the system to the field, a preferable method.

15. Professor Herman Goldstein, the originator of CPOP, came to Charlotte one week a month for eighteen months to assist police, citizens, neighborhoods, and GIS Analysts to apply the CPOP model utilizing the Scan, Analysis, Response, and Assessment (SARA) problem-solving model to actual communities.

16. Professor Goldstein brought Professor Ron Clarke from Rutgers University, the originator of "Crime Prevention through Environmental Design" (CPTED) to work with Professor Goldstein and the CMPD in the CPOP change model.

The presence of Professors Goldstein and Clarke, working with all sections of the department, community, and other stakeholders, elevated the knowledge-base and

application of GIS, CPOP, and CPTED to new heights. As a single event, their presence and later publication of case studies promoted the concept to the adoption of others.

17. Highlighting the work of street officers, supervisors and citizens across the city by presented their particular CPOP projects and reported progress to the Department's weekly command staff. What stands out was the pride displayed by patrol officers, their supervisor and community members presenting how they identified a problem, the process to address it and the sustainable solutions determined. Assisting was a GIS Analyst, present with them and showing GIS maps and other visuals of their work.

18. Publishing the work of the GIS Unit, participation at national conferences, and collaboration with other researchers and police/sheriffs. Through their personal effort and commitment, widespread recognition was achieved. It was one of the most rewarding of accomplishments.

19. Conducting field-based CPOP with police and Sheriffs across North and South Carolina, assisting in the data collection, analysis, program planning, implementation and analysis of outcomes. The GIS, Analysts, Planning and Evaluation team would travel to police and sheriff agencies and engage in evaluation and program development. In this process, we sought to teach the skills they would continue to use into the future.

### **Of Personal Note:**

If we measure the results of life engagement regarding fulfillment, we must include those opportunities that were life-changing. When reality changes, we often realize how unique and valuable the individual's experience was for them. To be part of a movement involving 2000 police department employees, working with citizens and stakeholders across the City of Charlotte, bringing new concepts, new ideas, and innovation that changed individual and community quality of life; is rarely experienced twice.

**Where mindless prattle  
seldom provides  
solution, engagement in  
a new challenge that  
emerges triumphant,  
has the effect of  
changing one's life  
forever.**

Typing this overview assists in clearly seeing the faces of that outstanding group of men and women who made the CMPD RP&A Bureau exceptional in the policing field. Utilizing both sworn and civilian members was the key, as their commitment, engagement and the creation of new practices, while engaged with others who also carried the banner, substantially strengthened outcomes.

The real message lies within the items of change listed above. A vision and process, resulting in the merger of services with citizen input and participation, leads to improved quality of life. Communities where race, culture, traditional and perceived separateness of contributing to improvement are often dysfunctional, change is more

difficult. As they coalesced to improve the environment; citizens, stakeholders, elected and appointed officials, and the police stood in silence with the realization that humanity can change. It demands collectively working together for a common purpose, with vision and appropriate goals. It does not take place through edict or general order, but the associations of individuals, who are willing to listen, express their thoughts and needs and then stand together to build a new horizon arrived at mutually.

It seems we need to hear this lesson over and over, perhaps never more than today.

### **Acronyms.**

CHA	Charlotte Housing Authority
CICP	Carolinas Institute for Community Policing
CMPD	Charlotte-Mecklenburg Police Department
COP	Community Oriented Policing
COPS	Community Oriented Policing Services (NIJ)
CPOP	Community Problem Oriented Policing (Goldstein)
CPTED	Crime Prevention through Environmental Design (Clarke)
DOJ	Department of Justice
ESRI	Environmental Systems Research Institute
GIS	Geographic Information Systems
UNCC	University of North Carolina at Charlotte
RP&A	Research, Planning & Analysis (At Charlotte-Mecklenburg Police Dept.)
SARA	Scan, Analysis, Response, Assessment (Goldstein's problem-solving model)

[1] Goldstein, Herman. (1990). Problem Oriented Policing. New York, NY. McGraw-Hill.

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