

Background on North Buckhead's Security Camera Planning

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Compared to much of 2016, crime in residential parts of North Buckhead is down. That's the good news. The bad news is that it's down, not gone. There is still work to be done. Fortunately, crime in our part of Atlanta generally means property crime and not violent crime. Still, it's crime and we need to fight it.

The City has made a large and impressive investment in technology. They have a state-of-the-art Video Integration Center (VIC) which manages the effective utilization of the 400+ city-owned cameras and the 10,000+ privately owned cameras linked to the VIC.

The VIC and 911 center are co-located on the same floor of a Peachtree Street building, separated by a glass wall. When a 911 call comes in, the APD system is smart enough to activate the four cameras physically closest to the 911 call. The cameras' feed is reviewed by VIC analysts and can be "rewound" so events leading to the call can be reviewed to provide key information that responding officers need. It is an impressive demonstration of technology that makes me proud to be an Atlantan. The City has an effective system to respond to high profile (violent) crimes.

But what happens at the VIC if someone breaks into a car parked in a yard in North Buckhead? Well, not much. There are only so many work stations and analysts at the VIC, and they have appropriate crime priorities. After a while, an officer will show up at the North Buckhead home to prepare a police report.

The NBCA board has been researching actions that our neighborhood might take to help APD defend us. We have often tried to gauge neighborhood interest in security patrols. But patrols have never been supported since their cost is seen as high for the few hours they work.

The technology available today is awesome and cheap. We can rent cloud-based cameras capable of reading license tags and recording vehicle type and color. Cost on a 24x7 basis? About \$4 a day. Great. So why not cover the neighborhood with cameras? Sounds good, but if you have pictures of a hundred cars, which one is driven by the burglar who broke in an hour ago? We need a smarter approach.

We found an approach that seems to be cost effective and efficient if implemented carefully. We need to break the neighborhood into small areas with only a couple of ways in or out. Dead end streets are ideal.

We think the approach is feasible and we want to do real world tests on some pilot locations. The two pilot sites we have chosen involve dead end streets.

Since thieves don't hang around after they have loaded their car with stolen goods, the security cameras will be pointed to photograph the back ends of the cars leaving the pilot area. This enables the system to record the license tag number and, if it's daytime, the vehicle's color and type.

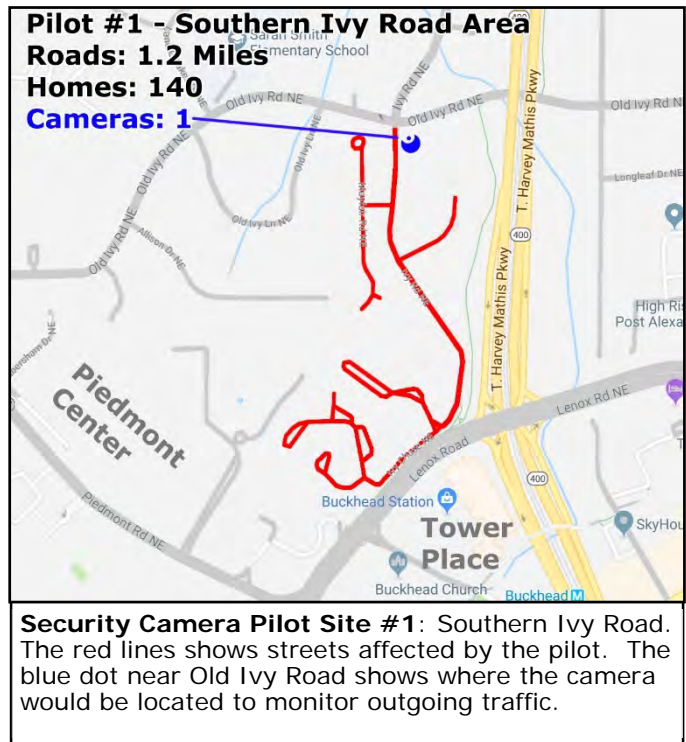
No attempt will be made to photograph the driver or passengers. Further, we want to respect neighbors' privacy, so there will be an "opt out" provision for neighbors who don't want to be tracked. In addition, images will be erased from the system after 30 days. Residents may get access to recorded images when a relevant police report has been filed.

The first site selected for a pilot project is Ivy Road, south of Old Ivy Road. It's an ideal area since there's only one way in and out. It has 140 homes including low-rise townhomes and single-family homes.

We will be able to tell in two ways whether the camera systems work: we'll know if it helps APD to catch crooks and we'll know if the crime rate drops, a sign the word is out among crooks that North Buckhead has good security cameras and they need to conduct their trade elsewhere.

The other pilot street is Alexander Road. It includes the Park Regency Condominiums and hundreds of apartments. See www.nbca.org/pilot for more about NBCA's plan. If we run into problems, we may pick another area. We might encounter unforeseen issues and re-evaluate. That's why we're doing a pilot, to learn without making expensive mistakes.

The vendor we're working with is Atlanta-based **Flock Safety**, www.flocksafety.com. Its CEO, Garrett Langley, is a Georgia Tech electrical engineer and a Buckhead resident. Our pilots will cost about \$6,000 (\$3,000 each) over two years, paid from NBCA's cash reserves. (See page 11.) While seeming to be a lot of money, the cost per home protected per year is low.



Cordon Certain Presentation to Buckhead Council of Neighborhoods And Related Thoughts

At the February 8, 2018 BCN meeting the topic was neighborhood security cameras. Gordon outlined an alternative that NBCA had initially considered: the perimeter approach. This would involve putting a camera at every entrance/exit to the neighborhood. If a burglary happened in North Buckhead, there would be a 100% chance a perimeter system would get a photo of the perpetrator (unless the burglar lives in North Buckhead which is not likely but possible).

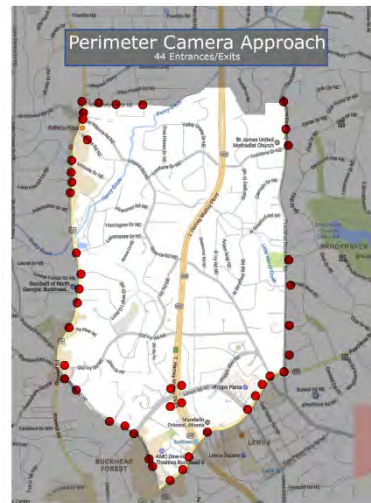
What's wrong with the perimeter idea? Think about the traffic North Buckhead has internally. North Buckhead's internal traffic volume is at least 50,000 cars a day. Wieuca Road by itself has over 10,000 cars a day. The western part of Lenox Road where it meets up with Piedmont has over 40,000 a day.

So, when the burglar leaves the neighborhood with the possessions he took from a resident, which way di he/she go? Well, as shown in the figure above, there are over 40 ways out of the neighborhood. That means that in order to identify the burglar, you have to consider the camera records for at least 40 cameras. That takes a lot of time. Since the burglar is mixed up with lots of innocent traffic, it is very difficult to prepare a useful set of pictures and tag numbers of cars that might be the burglar.

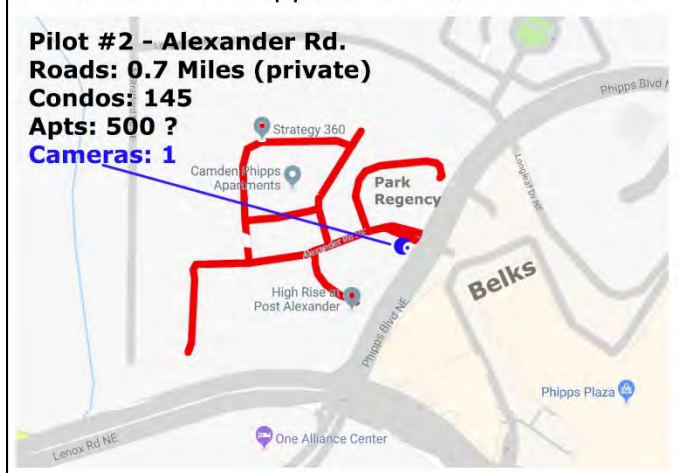
What's the alternative? Consider a dead-end street. There's only one way out. If you have a camera at the exit to the dead-end street, you are guaranteed to get a photo of the burglar if they drove a car. That's how we came up with the proposals for camera Pilots #1 and #2. An image of Pilot #1 was shown above. The image at the right is what pilot #2 on heavily populated Alexander Road looks like.

Both Pilot 1 and 2 use the same philosophy in pointing the cameras. Our cameras a pointed so we can photograph the license tag of cars leaving the dead-end street. The cameras will also photograph the front ends of cars when they enter. But the burglar is likely to leave shortly after the burglary, so when you get the tag numbers, they are likely to include the suspects, one of whom will be the burglar.

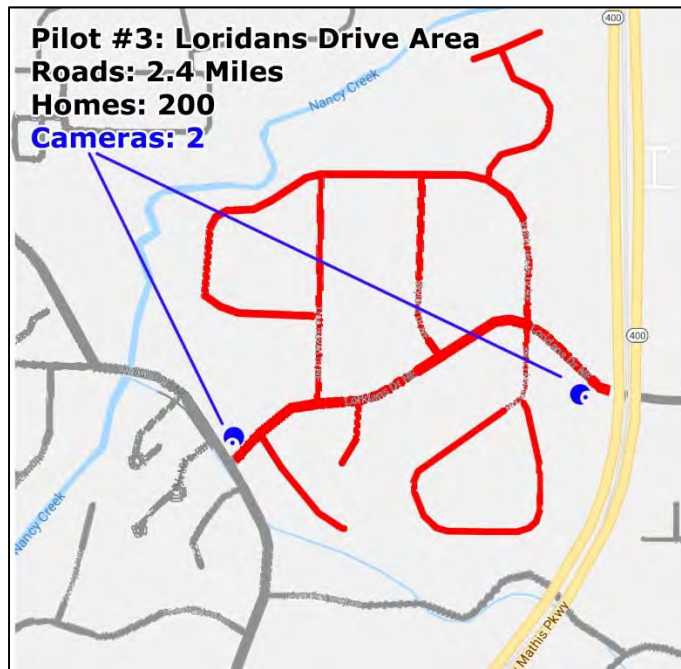
North Buckhead Approach – Perimeter? No!



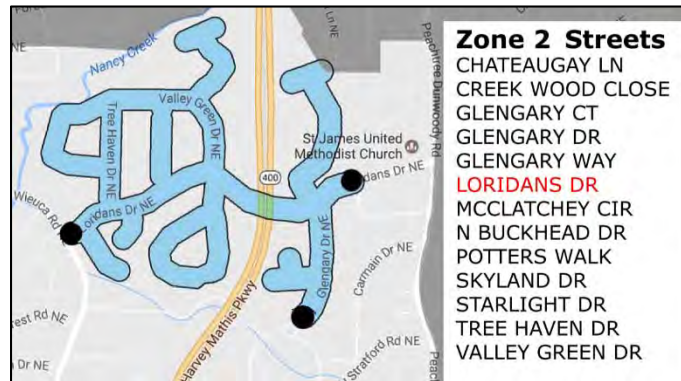
North Buckhead Approach – Small Cells? Yes



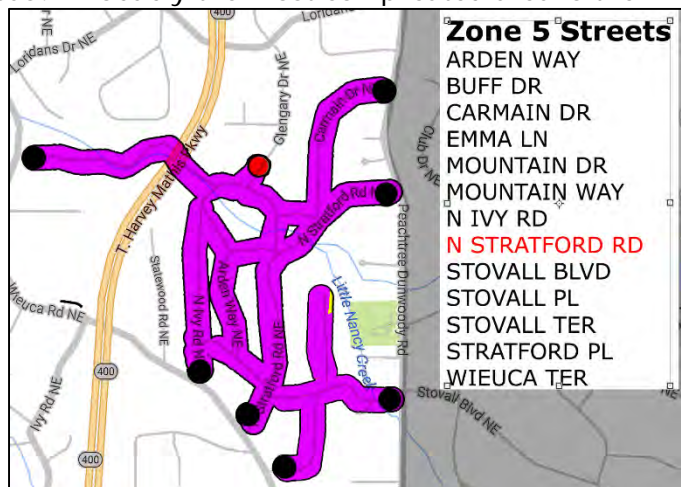
What about the rest of the neighborhood? The rest of the neighborhood tends to be more complicated, but with the exception of very high traffic volumes on Wieuca, West Wieuca and Peachtree Dunwoody, there are feasible solutions. This high We can break up the neighborhood into "cells" with relatively few ins and outs. Here is a solution involving two cameras on Loridans Drive protecting right whole streets plus a large hunk of Loridans Drive. One camera would be on the downhill park of Loridans as it approaches Wieuca Road. The other would be on eastbound Loridans as it approaches the Ga 400 bridge. This figure was entitled "Pilot #3" because at the time we were considering a third pilot.



That third pilot its still a possibility, but right now we are focusing on two simpler pilot projects. Ultimately, we will likely follow an earlier plan called "Zone 2" that would expand the Loridans pilot to add another camera and another 100 homes. It would look like the figure to the right and would include about 300 homes.



How hard is it develop to a plan that covers all the ways in and out of other areas? Probably the most complicated area is the area we call Zone 5 which Includes Carmain Drive on the northeast, Stovall Boulevard on the southeast, part of Wieuca Terrace at Wieuca Road on the southwest and Mountain Way at Wieuca Road on the northwest. It looks like this and requires 8 cameras to protect 286 homes. (The red camera dot on Glengary is a reminder that there would be two cameras at that location, one capturing northbound license tags, one southbound.)



How might the rest of the neighborhood be served? The next page shows how 33 cameras could cover the vast majority of the neighborhood, but clearly not all homes. Is this plan feasible? Probably. Is it the final plan. No. Right now it is a start, an outline of how the

neighborhood might be broken into security camera cells. Are there holes in this plan? Yes, Wieuca Road, West Wieuca Road, Roswell Road, and Peachtree Dunwoody Road and the smaller roads that connect to them are omitted because we haven't figured out how to help them in a reasonably cost-effective way.

