# Work Scheduling in the Miami Beach Police Department 

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Solutions, Inc. Points of view in this document are those of the authors and do not necessarily represent the official position or policies of the Miami Beach Police Department or the City of Miami Beach.

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# Work Scheduling in the Miami Beach Police Department Executive Summary 

Miami Beach Police Department (MBPD) commissioned $21{ }^{\text {st }}$ Century Solutions, Inc. to conduct an evaluation of the costs, benefits and other potential consequences of instituting $3 / 12$ scheduling (three consecutive 12-hour work days) in place of the current $4 / 10$ plan (four consecutive 10-hour work days). The Department's goal is to increase officer coverage on each shift, while decreasing costs and minimizing adverse impacts on the Department, community and officers.
$21^{\text {st }}$ Century Solutions, Inc. examined the potential impact of the proposed changes on overtime hours and costs, shift coverage, the ability for officers to work off-duty jobs, and officer health, safety and morale. We interviewed MBPD patrol staff including lieutenants, sergeants and officers. We collected information from the court liaison and staff, and from personnel in other Florida police departments that already use $3 / 12$ scheduling. We examined existing reports and statistics to collect data on alternative shift schedules and overtime usage.

Key findings:

- $3 / 12$ scheduling could allow the Department to increase the number of officers on duty per shift.
- $3 / 12$ scheduling can eliminate approximately 59,000 overlap hours paid by the City, the equivalent of 28 officers working 2,080 hours per year. ${ }^{1}$ On the other hand, without careful planning, eliminating overlap hours during shift changes may result in a decline in coverage and longer response times to calls for service at these times. Delayed shift start times for one-half of the patrol could address this concern.
- $3 / 12$ scheduling reduces the number of patrol squads and thereby reduces the number of sergeants required to supervise patrol squads. Currently, at least eight sergeants work during each of the three shifts or at least 24 per day. With the $3 / 12$ schedule, a minimum of 19 sergeants would be required, a potential reduction of five sergeant positions in patrol.
- Savings in overtime hours and costs were examined by overtime expense category:

[^0]- Overtime for special events now accounts for $58 \%$ of total overtime costs; this is expected to increase gradually as the City's popularity as an entertainment venue continues to grow. $3 / 12$ scheduling is unlikely to make a difference in special event overtime costs.
- Overtime to maintain minimum or adequate staffing levels accounted for $\$ 109,000$ in overtime costs during the first five months of 2003. $3 / 12$ scheduling should reduce this cost category significantly.
- $3 / 12$ scheduling is unlikely to reduce overtime costs for officer court appearances. Costs for officers working night shifts could increase to compensate for longer wait times between the end of the late shift and court opening.
- 3/12 scheduling could reduce overtime costs for special assignments, provided that some of the increased officer coverage is dedicated to proactive (preventive) enforcement activities.
- $3 / 12$ scheduling may result in a net increase in hours available for officers to work so-called "off-duty jobs;" however, employers would need to make schedule adaptations
- Our sample of Florida police departments that now use $3 / 12$ scheduling report no significant evidence of negative effects on officer health and safety. Studies of similar scheduling in other work settings suggest fatigue-related problems might be expected; data should be collected systematically and analyzed to confirm "no adverse effects" reporting.
- Initially, officer morale may decline with a change to $3 / 12$ scheduling, particularly with any option that does not offer stable days off. The experiences of other departments suggest that time, clear briefings and flexible implementation may improve acceptance and facilitate morale recoveries. MBPD would be replacing $4 / 10$ scheduling that is well-accepted, and some officers question the City's motives, increasing the likelihood of an initial negative reaction.
- Depending upon which $3 / 12$ scheduling option is adopted, training overtime hours and costs could increase.
$21^{\text {st }}$ Century Solutions, Inc. recommends that the MBPD continue its current scheduling plan until it can collect and analyze data to document calls for service and incident data. A baseline that will help the

Department to clearly understand the workload and busy time periods is necessary before making a shift to a $3 / 12$ work schedule.

If MBPD opts to consider a $3 / 12$ shift, we recommend they implement a flexible schedule, allowing maximum involvement of patrol officers and the union in the planning phases.

# Work Scheduling in the Miami Beach Police Department 

## Miami Beach: Background

Miami Beach is a city of diverse cultures, identities and lifestyles. Revitalization of South Beach has created a tourist mecca that attracts up to 7 million visitors a year ${ }^{2}$, mostly the young and boisterous in search of lively entertainment. Miami Beach has three distinct law enforcement districts, described by one police captain as "three small cities:"

- The South District, home to MBPD Headquarters, extends from $17^{\text {th }}$ Street to the south end of the peninsula, bordered by Biscayne Bay and the Atlantic Ocean. This is the heart of the entertainment industry, with numerous nightclubs and high-rent condos. The area attracts a young crowd, mainly Hispanic and Caucasian, around the clock. Fights, burglaries, armed robberies and prostitution keep police occupied.
- The Middle District, a wealthy residential area, is also bordered by the Bay and the Atlantic, beginning at $17^{\text {th }}$ Street and extending to $63^{\text {rd }}$ Street. The district is $90 \%$ residential and $10 \%$ commercial. Most calls for service are for alarms or burglaries-in-progress. Occasional apartment-based drug sales are handled by undercover agents.
- The North District lies between $63^{\text {rd }}$ Street and $87^{\text {th }}$ Terrace, bordered by Surfside and North Bay Village. A small police substation is located here. Section 8 and other lowincome housing units plus apartment buildings account for many of the residential properties. Revitalization is occurring, similar to that in the 1990's in the South District. The district's service call load has been increasing gradually.

In addition to these three districts, MBPD serves Star Island, Palm Island and four causeways (and adjacent islands) that connect Miami Beach with Miami - MacArthur Causeway (I-395), Venetian Causeway, Julia Tuttle Causeway (I-195), and J.F. Kennedy Causeway. Police are called relatively infrequently to the Islands. The causeways appear to present opportunities for prevention tactics. For example, the Motors unit recently prevented an unauthorized demonstration by establishing a checkpoint
for trucks crossing the causeway, as a deterrent to drivers who may have intended to block the roadway. Causeways are ideal for blocking traffic to secure the City in the event of a terrorist threat. At the same time, such limited access to the Beach results in significant traffic problems at all hours.

Miami Beach has three public elementary schools, a middle school and a high school (located in the Middle District), as well as two Catholic elementary schools and a Jewish high school. Mount Sinai Hospital is located in the Middle District; Mount Sinai is the area's trauma and emergency room hospital, so many calls for service are generated there, regardless of where the precipitating incident may have occurred.

In the absence of formal data on calls for service, we interviewed officers and staff to gather information about typical shift workloads. Day shift officers deal with domestic disputes and traffic accidents, and the Motors squad conducts preventive policing, such as setting rush hour speed traps. Officers may initiate problem prevention activities, as well. Calls for service take precedence over proactive enforcement activities. Even considering peak call loads, MBPD averages a 4-5 minute response time to a call for service, the fastest time in the Dade County area, according to interviewees.

Officers working afternoon and midnight shifts frequently handle disturbances and DUIs. On afternoon
Miami Beach Police Department

| Population | 88,972 |
| ---: | ---: |
| Total Index Crime | 10,390 |
| Murder | 7 |
| Forcible Rape | 51 |
| Robbery | 507 |
| Aggravated Assault | 512 |
| Burglary | 1,464 |
| Larceny | 6,639 |
| Motor Vehicle Theft | 1210 |
| Crime Rate Per |  |
| 100,000 | $11,677.8$ |

Soure: FBI Uniform Crime Report data, 2002
shifts, officers are called upon to respond to domestic violence, landlord-tenant disputes, adult and minor drug use, runaways, vagrancy and traffic accidents. On a typical shift, an officer may need to cover as many as six calls, any one of which can take up to two and a half hours. Midnight shifts experience heavy call loads; interviewees call this the most stressful shift. Officers log every call and incident; on the midnight shift, they can easily fill two $\log$ sheets. Nightclub disturbances are the worst problem, with Thursday through Sunday being the busiest part of the week.

The per capita crime rate for Miami Beach is high, particularly for non-resident on non-resident crime. Some officers view MBPD as an "overtime-based, special events driven" department. The City is a

[^1]popular venue for special events, drawing six to eight million visitors per year. This creates special crimerelated problems, and these are escalating. In addition to the usual drunk-and-disorderly-conduct calls, opportunistic criminals have begun committing more robberies of intoxicated individuals coming from nightclubs.

Disturbances of the peace, or quality of life problems, also surface where many younger people congregate. The Department gets frequent calls about excessive noise and loud music. Police are publicizing pertinent ordinances and the consequences of violating them, hoping to reduce such calls. A recent city ordinance now bans those under 21 from area bars.

Predictably, traffic is the most compelling problem for the Motors unit. Speeding violations mount during morning and evening rush hours. Of course, in a densely populated area of only nine square miles, traffic is a constant source of trouble. MBPD is adding more officers to manage weekend traffic.

For several years, the political will of the city was driven by what was good for club owners. An influx of high-rent condominiums is changing this. Condo owners and residents are politically active, and their interests are often opposed to those of club owners. They want fewer impediments to their "quality of life" - annoyances such as loud radios, public disorder and drunkenness, and animal waste deposits left in public areas require attention. This affects the way policing is conducted. Several interviewees repeated a comment made during a recent leadership training session: "[Miami Beach] doesn't know who we want to be." Elections in 2003 may provide insight into which voter base will be most influential; this in turn is likely to help redirect law enforcement priorities and needs.

## Staffing and Shifts

As of March 17, 2003, Miami Beach employed 272 patrol officers, supervised by 10 captains, 18 lieutenants and 59 sergeants. Of the 272 patrol officers, 144 are assigned to work in squads, while others are part of the bike patrol unit, motors unit and other specialized units. Captains administer operations and carry out other executive duties, eight hours a day, five days a week. Most work overtime to keep up with the workload.

MBPD observes minimum staffing standards -- eight patrol officers in the South District, and six each in the Middle and North districts. Officers called to appear in court are counted toward minimum staffing numbers, but officers in specialized units do not normally respond to service calls, and so are not counted. When patrol units fall below minimum staffing for any reason, supervisors call in off-duty officers or extend the shifts of on-duty officers. Patrol sergeants may combine squads to increase police presence in more highly trafficked areas.

Three bike units operate with their own sergeants, at Washington Avenue, Lincoln Road and Ocean Drive. MBPD is evaluating whether to assign another officer on a bike to work the midnight shift, 9:00 p.m. to 7:00 a.m. The Middle District also has accident patrol and beach units, as well as a marine patrol unit of six officers. The Department employs civilian Public Service Specialist to handle non-emergency services such as directing traffic. The civilians work 8-hour days, five days a week, from 7:00 a.m. to 3:00 p.m.

MBPD officially operates under the district plan, but squads are frequently pulled out of their own districts to meet minimum staffing in another district. Supervisors occasionally must pull officers from the Motors or Bike units to achieve minimum coverage. Managers are very aware that these practices incur overtime costs and that local community members note when their regular "beat" or zone officers are missing from their usual posts.

At least 20 years earlier, MBPD changed from a 5-day, 8-hour schedule to its present schedule of three 4/10 shifts: day ( 7 a.m. -5 p.m.), afternoon ( 3 p.m.-1 a.m.) and midnight (11 p.m.-9 a.m.). Patrol staff work four 10-hour days, then take off three days. Supervisors report that MBPD officers usually prefer to work on the weekend, with the midnight shift being most popular, followed by the day shift. Day and afternoon shift sergeants and lieutenants whom we interviewed said that they enjoyed and miss working midnight shifts. Experienced officers generally prefer either morning or midnight shifts; afternoon shifts are least-favored. Tuesday, Wednesday and Thursday are preferred for days off. When not on duty, officers like to avoid crowds; they like to go to the movies or eat out in the middle of the day and mid-week, when crowds and lines are not an issue.

Midnight shifts carry the heaviest workloads with more interesting calls. We repeatedly heard that on the midnight shift "all the brass is gone and all the bad guys are out." When not working the late shift, most officers said that they worked off-duty at nightclubs to stay in the routine.

Every six months MBPD conducts a "shift bid" during which, in order of seniority, officers can select particular shifts. During bidding, an officer may lose a shift to another more senior officer. When choosing a shift, bidders consider not only shift attributes, but the associated days off and the identity of the shift supervisor. To accommodate this, supervisors actually complete their shift bids before officers. In fact, scheduling normally remains relatively stable between bidding periods, averaging 15 changes. Recently, however, between 35 and 40 staff changed work schedules. In any case, the process is relatively complicated and time-consuming.

## Research Methods

Key research questions included:

1. What alternative $3 / 12$ scheduling options are feasible?
2. What are the costs and benefits of each scheduling option?
3. Must all staff be assigned according to the same scheduling plan?
4. What potential costs and benefits might the City of Miami Beach realize from $3 / 12$ scheduling?
5. Would $3 / 12$ scheduling improve officer shift coverage?
6. Would $3 / 12$ scheduling reduce, increase or have no impact on overtime?
7. How would $3 / 12$ scheduling impact court time and court overtime?
8. What impact would $3 / 12$ scheduling have on the availability of work for off-duty officers?
9. What impact would $3 / 12$ scheduling have on officer safety and health?

10 . What impact would $3 / 12$ scheduling have on officer morale?

Information was collected from:

1. Interviews with Miami Beach Police Department personnel.
2. Interviews with the president and vice-president of the Union.
3. Interviews with personnel from other Florida police departments that employ $3 / 12$ scheduling
(including Palm Bay, Boca Raton and Palm Beach County Police Departments).
4. Interviews with the Miami Beach court liaison.
5. The 2001 Law Enforcement Work Shift Survey, LRIS (Labor Relations Information Systems), 2002. ${ }^{3}$
6. MBPD overtime records, January - May, 2003.

Data related to calls for service and off-duty jobs would have been useful for this evaluation, but were not available. Instead, we asked interviewees to recall recent shifts, describing the number and types of calls they had answered. In addition, the sergeant who oversees off-duty jobs extracted several summary data elements about those jobs -- for example, total number of hours worked and total number of officers working off-duty jobs. We relied upon our own judgment and perceptions for interpreting trends and factors associated with the proxy data sources.

Our interviews guided our perceptions about opportunities and challenges that a change from 4/10 to 3/12 scheduling might present. Telephone interviews with other experienced police departments informed our understanding of how those opportunities and challenges might be addressed. Information about overtime, off-duty work and court requirements contributed to the assessment of potential costs and benefits of the proposed scheduling changes.

[^2]
## ISSUES \& FINDINGS

Minimum Staffing. Miami Beach Police Department operates at or below minimum staffing on most days, according to Department staff; approximately 30 patrol officers are providing police services during any given shift. According to interviewees, MBPD "has always been trying to play catch-up." Twenty or more officers retired in 2001 during Florida's first Deferred Retirement Option Program (DROP) cycle. Since then, another twelve have retired. The Department has been hiring new officers, but budgetary constraints have prevented filling all vacancies. Further complicating the situation, specialized units may pull officers off the street for certain assignments. More than 20 officers are scheduled on duty at all times, but this is inadequate to meet minimum staffing for covering calls for service. Of the 20 , one officer is stationed at the front desk, and others may be on vacation or sick leave, or in training. All of these factors leave supervisors scrambling to fill shifts on the street.

We asked how MBPD's minimum staffing levels were derived. Supervisors were unclear about its origins; among officers, however, it was "common knowledge" that the numbers originated from an FBI formula based on per capita and crime statistics. Officers expressed concern that the so-called FBI standard does not take into consideration Miami Beach's unusually high number of tourists. ${ }^{4}$

Interviews with other departments revealed that the central motivation behind institution of $3 / 12$ scheduling is to increase officer presence on the streets, while staying within budgetary limits. By realigning hours worked, eliminating overlapping shifts and reducing overtime, the departments can redirect funds to placing more patrol officers on each shift.

Alternative 3/12 Scheduling Options. Several options exist for configuring 3/12 scheduling, each with inherent strengths and weaknesses. ${ }^{5}$ A straight $3 / 12$ work week - three 12 -hour days on followed by four

[^3]days off - would provide an officer with only 36 working hours per week, a four hour deficit. Various alternatives have been instituted in other departments for achieving the equivalent of 40 -hour work weeks over the course of a two-week scheduling unit.

- The most attractive $3 / 12$ option seems to be a schedule of three days on and four days off in Week One (totaling 36 hours), followed by four days on and three off in Week Two, with the fourth "on" day being an 8 -hour shift ( 44 hours). This totals the requisite 80 working hours over the 2 -week scheduling unit. Agencies often use the 8 -hour shift for training and special operations.
- An alternative $3 / 12$ option is a schedule of four days on and three days off, followed by three days on and four days off. This causes officers to work 84 hours every two weeks, so they receive an additional compensatory day off every six weeks. One department using this plan rotates shifts every four weeks to assure that everyone has an occasional weekend off.
- Some departments use a version of $3 / 12$ scheduling that necessitates routinely rotating days off. Their scheduling pattern is two days of work, two days off, followed by three days of work and three days off. This option also results in 84 hours worked every two weeks, and a compensatory day off every six weeks. The specific days off for each officer vary from week to week under this plan.

Benefits of $\mathbf{3 / 1 2}$ Scheduling. The most interesting opportunity presented by $3 / 12$ scheduling is the ability to place more officers on each shift for approximately the same cost. Part of the savings comes from elimination of "overlap" staffing. The $5 / 8$ and $4 / 10$ scheduling plans require three changes of shift. As each shift ends, officers are traveling back to their stations, checking in equipment, completing paperwork and addressing personnel issues. For the first hour of each shift, the reverse is true: officers are reporting for roll call, checking out equipment and traveling to their assigned zones. To maintain service levels during each shift change, the Department has traditionally used 2-hour "overlap" scheduling, paying for the equivalent of staffing a 30 -hour day.

The 3/12 option eliminates one shift change period per day, and it eliminates overlap scheduling for the remaining two shifts. However, the Department would need to address MBPD officers' concerns about shift changes, especially for the Middle and North districts. For example, all officers answer roll call and pick up equipment at the main station, in the South District. Roads are usually congested, and it can take as long as 30 minutes to reach a North District zone. The practice with overlapping shifts is to route calls for service during this period to officers already on duty. With $3 / 12$ scheduling, without some alternative coverage, calls for service during shift changes would go unanswered until oncoming officers were available. Other strategies can be employed to assure adequate coverage at these times.

Operational changes would be essential to minimize this "down" time. Before making a change, MBPD should collect and analyze data on calls for service to identify the lowest call times of day, and consider scheduling shift changes during those times. MBPD should also assess officers' activities as they begin and end their shifts. We strongly recommend objectively observing activities using a coding instrument, because self-reporting - drawing from our own general beliefs and perceptions - can be misleading.

In any profession, an 8- or 10-hour work day involves periods of working on tasks alternating with periods of preparation or winding down, lunch hours and scheduled breaks. We also learned during our interviews that some officers do not initiate traffic stops at the end of their shifts, out of concern that they will be prevented from leaving on time. MBPD could accommodate these and similar practices by recognizing that they exist and planning for them.

For example, we know that in Miami Beach, traffic is heaviest in the mornings (7:00 a.m. to 9:30 a.m.) and late afternoons (4:00 p.m. to 6:00 p.m.) Weekends add to the challenge, now that Miami Beach is one of the premier club districts in the world. On Memorial Day, New Year's Eve and during hurricane watches, MBPD adopts its "Alpha/Bravo" schedule: three 12-hours shifts (beginning at 6:00 a.m., 6:00 p.m. and 8:00 p.m.) that are heavily staffed; off-duty jobs and vacation time are cancelled. Based on experience with this shift schedule, 12-hour shifts beginning at 6:00 a.m. and 6:00 p.m. may be the optimal schedule. Officers traveling to their zones would avoid morning rush hour and would be traveling against the early evening rush hour. We believe that the call load is low at 6:00 a.m., based on staff perceptions; however, we do not have enough data to estimate the effect on call coverage during the evening shift change.

As part of a union assessment of $3 / 12$ scheduling, a police officer developed a schedule (4-3/3-4) that addressed the overlap needed between shifts by staggering the four shifts. One shift is from 6:00 a.m. to 6:00 p.m. A second shift, creates the overlap period by reporting for duty at 7:30 a.m., working until 7:30 p.m. The third and fourth shifts follow these shifts, operating from 6:00 p.m. to 6:00 a.m. and 7:30 p.m. to 7:30 a.m., respectively.

We have developed a $3 / 12$ scheduling option that maximizes the number of officers working on the busy weekends and addresses the heavy court load, usually scheduled on Mondays. This schedule is shown in the figure on the next page. The schedule includes the following assumptions:

- We assume 145 officers are split between the two shifts with 69 officers working the day shift and 76 officers working the night shift.
- Officers are divided into nine squads in the Dayshift and 10 squads in the Nightshift, for a total of 19 squads supervised by 19 sergeants.
- Five squads would work an altered $3 / 12$, two during the day shift and three during the night shift. ${ }^{6}$

Supervision. The $3 / 12$ schedule reduces the number of shifts and the number of squads of patrol officers. Five to eight patrol officers are assigned to each squad. Currently, MBPD patrol division operates with a minimum of four squads assigned to the south, and two to the middle and north during each shift. At least 24 sergeants supervisor these squads.

With the $3 / 12$ schedule outlined above, we assumed seven to eight patrol officers per squad, each with its own sergeant. Using this configuration, 19 sergeants would be needed. MBPD could reduce the number of sergeants by five positions.

Overtime. Overtime has become an issue with those associated with MBPD. Management is concerned about escalating costs. The union is concerned about officer fatigue and safety. Officers enjoy the pay, but dislike forced overtime and the number of hours involved, for many reasons. According to MBPD executives, overtime issues are driving their evaluation of the relative merits of $4 / 10$ and $3 / 12$ scheduling.

[^4]
## 3／12 Scheduling Option Diagram

|  | Dayshift Staffing（Officers＝69） |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  | 1 |  |  |  |  |  | 8 | 8 | 8 | 8 | 8 |  |  |  |  |  | 8 | 8 |  | 8 |  |  |  |  | 8 | 8 | 8 |
|  | 2 |  |  |  |  |  | 8 | 8 | 8 | 8 |  |  |  |  |  | 8 | 8 | 8 |  | 8 |  |  |  |  | 8 | 8 | 8 |
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| $\stackrel{\check{\omega}}{\omega}$ | 5 |  |  |  |  |  | 7 | 7 | 7 | 7 | 7 |  |  |  |  | 7 | 7 | 7 |  |  |  |  |  | 7 | 7 | 7 |  |
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|  | 9 | 7 | 7 |  |  |  |  |  |  |  | 7 | 7 | 7 |  | 7 |  |  |  |  |  | 7 | 7 | 7 | 7 |  |  | 7 |
|  |  | 30 | 30 | 23 | 23 | 23 | 39 | 39 | 39 |  | 30 | 30 | 30 | 03 | 30 | 31 | 39 | 39 | 2 | 3 | 30 | 30 | 38 | 8 | 39 | 39 | 32 |


|  | Nightshift Staffing（Officers＝76） |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| － 6 |  | 8 | 8 | 8 |  |  |  | 8 | 88 | 8 |  | 8 |  |  |  | 8 | 8 | 8 |  |  |  |  |
| 岢 7 | 8 | 8 | 8 | 8 |  |  |  |  | 8 | 8 |  | 8 |  |  |  | 8 | 8 | 8 |  |  |  |  |
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| 9 | 8 | 8 | 8 | 8 |  |  |  |  | 8 | 8 |  | 8 |  |  |  |  | 8 | 8 | 8 |  |  |  |
| 10 |  |  |  |  | 7 | 7 | 77 | 77 |  |  |  |  | 7 | 7 | 7 |  |  |  | 7 | 7 | 7 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 31 | 32 | 32 | 32 | 44 | 444 | 44 | 30 | 32 | 32 |  | 2 | 36 | 44 | 44 | 40 | 32 | 32 | 29 | 37 | 44 | 37 |

Assumptions：
Dayshift：6：00 am－6：00 pm；Nightshift 6：00 pm－6：00 am
Five squads－ 2 dayshift and 3 nightshift working altered $3 / 12$ shift

Currently, the patrol unit is allowed about 300 hours per pay period of general and other overtime, billable at $\$ 42.00$ per hour. Overtime includes extra hours worked to maintain minimum staffing levels, to fill in for officers who are absent for training, to cover for illness or leaves, to extend shifts to complete calls, and to work on special projects (such as proactive and problem-solving policing).

Overtime had become a regular workload management tool that lacked close monitoring. Beginning in FY 2002, overtime came under close scrutiny. The Assistant Chief of Administration instituted management policies to track, assess and review routine overtime uses. Requests must include the justification and specify the budget to be charged (e.g., General Fund, Special Events, Court, etc.) The Assistant Chief meets with division majors monthly to discuss overtime requests and costs.

The FY2003 General Overtime Fund is budgeted at $\$ 327,600$. Another $\$ 650,000$ is allocated for policing special events such as New Year's Eve, concerts and other activities (usually on South Beach). The City also allocates a special overtime fund for Memorial Day Weekend. Court overtime is paid from a separate budget. Sometimes additional funds are allocated for overtime hours -- usually for special assignments -from block grants, reimbursements from joint task forces, the Parks Department and other agencies.

We reviewed overtime usage during the first five months of 2003. Patrol logged 22,938 overtime hours at a cost of more than $\$ 985,000$, averaging of 4,600 hours and $\$ 197,000$ per month. Policing for special events consumed 13,215 overtime hours at a cost of more than $\$ 583,000$ ( 58 percent of all overtime expenditures from January to May). Memorial Day required over 7,500 hours and Spring Break used another than 2,600 hours. During such times, everyone is scheduled to work.

Traditional overtime activities, e.g., handling calls for service that extend beyond the end of shifts, traffic investigations and making up officer shortages, accounted for 11 percent ( 2,618 hours costing $\$ 126,000$ ) of overtime worked during the first five months of 2003. If the rest of the year continued at this rate, patrol officers would log over 6,000 hours at a cost of more than $\$ 260,000$.

Overtime for court appearances is another cost category that could be affected by $3 / 12$ scheduling. During the five-month period we reviewed, patrol officers spent 3,210 hours in court appearances at a cost of
$\$ 125,922$. If these months were typical, at this rate, officers would $\log 7,704$ court-related overtime hours at a cost of more than $\$ 300,000$ for the year.

Finally, we reviewed overtime use for special assignments such as task forces and projects to address targeted problems. In the first five months of the year, patrol officers spent 2,925 overtime hours on special assignments at a cost of $\$ 126,000$. Their activities included efforts to resolve a problem with a serial burglar, work on domestic security issues and participation on a quality of life task force, as requested by the City and residents in the South end.

Overtime Related to Officer Shortages. Patrol documented 407 incidents of overtime to cover officer shortages for the five months we reviewed. Forty-seven percent of the incidents (193 incidents) each resulted in 6.5 overtime hours logged; 15 percent of the incidents resulted in one hour of overtime each.

| Day | Overtime shifts <br> worked, Jan to <br> May by day |
| :--- | ---: |
| Sunday | 88 |
| Monday | 43 |
| Tuesday | 36 |
| Wednesday | 50 |
| Thursday | 61 |
| Friday | 67 |
| Saturday | 71 |

Officers report that they are frequently held over beyond their regular shifts to cover shortages; newer officers on the force reported this most often. Overtime reports confirm that 15 officers worked shortagerelated overtime five or more times from January through May. In all, 107 officers worked overtime at least once during that period to cover officer shortages.

Overtime was required to compensate for officer shortages on 125 days ( 80 percent of the time) in the first five months of 2003. For most of those days, at least three officers were working extra hours, peaking once at a high of sixteen officers. One-third of the time, four or more officers were working overtime. Sunday was the day most frequently staffed this way; 88 of the overtime shifts occurred then.

Overtime should decrease with $3 / 12$ scheduling. During the two-week scheduling unit, most days an additional two to 15 officers per shift should be available to cover the workload. This is especially true on the weekends, where overtime use was heavy. The table below shows the additional officers available per day with the $3 / 12$ scheduling option we proposed earlier in this report.

We asked departments that have already converted to $3 / 12$ scheduling whether they reduced their
overtime hours. For the most part, they have not; overtime has remained stable or decreased very slightly. However, they attribute this to other complicating factors, such as reductions in force and increased responsibilities resulting from $9 / 11$ public safety needs; they believe that overtime would have decreased, had all other factors remained the same. It is also possible that without the scheduling change, staffing by overtime would have continued to escalate.

| Dayshift Comparison |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ofc. $=69$ | M | T | W | T | F | S | S | M | T | W | T | F | S | S | M | T | W | T | F | S | S |
| 3/12 Schedule | 30 | 30 | 20 | 20 | 39 | 39 | 39 | 30 | 30 | 30 | 30 | 29 | 39 | 39 | 29 | 30 | 30 | 40 | 39 | 39 | 39 |
| Current <br> Schedule | 28 | 23 | 24 | 25 | 28 | 29 | 27 | 28 | 23 | 24 | 25 | 28 | 29 | 27 | 28 | 23 | 24 | 25 | 28 | 29 | 27 |
| Extra officers on duty with $3 / 12$ | 2 | 7 | -4 | -5 | 11 | 10 | 12 | 2 | 7 | 6 | 5 | 1 | 10 | 12 | 1 | 7 | 6 | 15 | 11 | 10 | 12 |
| Nightshift as Compared to Current Midnight Shift |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ofc. $=76$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3/12 schedule | 32 | 33 | 33 | 33 | 43 | 43 | 43 | 32 | 33 | 33 | 33 | 32 | 43 | 43 | 33 | 33 | 33 | 33 | 33 | 43 | 43 |
| Current Schedule | 29 | 24 | 27 | 27 | 32 | 29 | 28 | 29 | 24 | 27 | 27 | 32 | 29 | 28 | 29 | 24 | 27 | 27 | 32 | 29 | 28 |
| Extra officers on duty with $3 / 12$ | 3 | 9 | 6 | 6 | 11 | 14 | 15 | 3 | 9 | 6 | 6 | 0 | 14 | 15 | 4 | 9 | 6 | 6 | 1 | 14 | 15 |

Overtime Related to Court Appearances. Court-related overtime is required when officers must show up to be deposed, participate in pre-file and pre-trial conferences, and make appearances in county or state civil and criminal courts. According to the MBPD Court Liaison and supervisors, MBPD patrol officers are subpoenaed to appear about 2,500 times each month. Depositions and pre-trial conferences may take half an hour for misdemeanors, or up to three hours for homicides. The Standard Operations Procedures Manual states that pretrial conferences and depositions should be scheduled during the officer's regular duty hours whenever possible. This is monitored, but officers often reschedule depositions and pretrial sessions repeatedly, in effect forcing off-duty appearances.

Court time does not affect minimum staffing levels; officers are counted as part of the working platoon when in court, in spite of not being available to take calls. The scheduling Lieutenant oversees court appointments to assure adequate coverage on the street. Mondays are heavily scheduled with court appearances, and as many as 130 officers have been called upon to appear in one day. Officers working the midnight shift must use overtime for court matters; they may be ready to appear at $8: 30$ a.m., but few attorneys are.

In most cases, an officer will receive three hours of overtime for a court appearance (851 of 1,075 instances). In a few cases, an officer may receive only two hours of overtime for a court appearance (148 of 1,075 instances). Basically, officers receive three hours of overtime if the officer is in court for more than an hour. However, if an officer has court one hour before or one hour after the shift, two hours of overtime compensation are paid. For example, if an officer works an 11 p.m. to 9 a.m. shift and has court from 10:30 a.m. to 11:30 a.m., three hours of overtime compensation are paid. If court is from 8:30 to 9:30 a.m., the officer will receive two hours of overtime compensation. If the officer is in court for more than three hours, the actually number of hours are compensated (76 of 1,585 instances). For example, if the officer is in court from 9 a.m. to 2 p.m., five hours are compensated.

Two hundred officers logged court overtime, averaging three hours per instance, as indicated above. The maximum number of court hours logged by one officer during this period was 185 hours; approximately one-half of the patrol officers logged more than 12 court hours.

Scheduling for court time is challenging. The department has no control over when cases are in court. Interviewees felt this could become a problem with $3 / 12$ scheduling. For example, if an officer's shift ended at 6:00 a.m., there would be three hours to wait before 9:00 a.m., when many court appearances are scheduled. Night shift officers with court appearances could put in 17-hour work days that include three or more hours of wait time. According to one department that uses $3 / 12$ scheduling, this issue can be addressed by allowing flexibility in shift reporting times on court appearance days. The departments reported that $3 / 12$ scheduling has neither increased nor decreased significantly the amount of overtime used for court appearances.

Based on the above, we have three observations. First, staffing for Monday shifts should be reviewed; increasing the number of officers regularly scheduled on Monday day shifts could reduce court overtime while maintaining adequate coverage in the City. Second, flexible shift times and coordination with the court could control court-related overtime for night shift officers; they could shift work schedules an hour or two forward to reduce wait time between the end of their shifts and their court appearances. Finally, we believe that based on the available data and the experiences of other departments, if reasonable precautions against increasing overtime are taken, $3 / 12$ scheduling is unlikely to have a significant effect on court overtime.

Closer Look at Special Assignment Related Overtime. During the first five months of 2003, MBPD officers worked an average of five hours of overtime on special assignments for 133 of the 151 available days. As mentioned the assignment ranged from resolving problems with a serial burglar to working on special neighborhood quality of life issues. In total, there were exactly 1,000 requests for special assignment overtime. For most days, an average of seven officers was working on special assignment overtime. In 46 percent of the instances, five or fewer officers were working, while in 32 percent of the instances, five to ten officers were working special assignment overtime. Nineteen percent of the instances involved 10 to 20 officers, and the remaining four percent of the instances involved more than 20 officers with special assignment overtime on a given day. Friday and Saturday were the most frequently worked days of the week, averaging eight and 12 officers working, respectively.

| Special Assignment Overtime by Day |  |  |
| :---: | :---: | :---: |
|  | Special Assignment Overtime shifts worked Jan to May by day | Average number of officers working per day |
| Sunday | 176 | 8 |
| Monday | 126 | 6 |
| Tuesday | 105 | 5 |
| Wednesday | 76 | 4 |
| Thursday | 84 | 4 |
| Friday | 185 | 9 |
| Saturday | 249 | 12 |

Given this information, it appears probable that special assignment overtime should be reduced with an extra three to 20 officers assigned each day. In rare cases, such as saturation policing employed to address serious terrorist threats or criminal problems such as the serial burglary, MBPD should be able to assign enough extra staff to accomplish the preventive and proactive policing now staffed with special assignment officers working overtime.

Off-Duty Work Opportunities. Police officers, especially new ones at the low end of the pay scale, frequently work "off-duty" jobs that require security skills. Typically, temporary off-duty work opportunities include managing traffic during lane closures, guarding equipment, and providing security for special events and movie shoots. Permanent off-duty jobs might involve providing security at the door or gate for nightclubs and other entertainment venues. During their early years on the force, $\$ 25.00$ per hour for an off-duty job is more than officers can earn working overtime; they may make up to $\$ 3,000$ off-duty pay per month. Most do not work the weekly limit of 32hours; however, sometimes officers from departments that do not have these off-duty opportunities have even been willing to forfeit vesting in
retirement funds and start over at MBPD, mainly to take advantage of lucrative off-duty jobs. All things considered, officers may be receptive to a scheduling change that maintains or improves off-duty work opportunities.

The City and the Department may also have a stake in maintaining off-duty work opportunities for their officers. The City receives income from nominal administrative fees paid by private employers for processing requests for off-duty officers to fill positions. Also, off-duty work is nearly the equivalent of preventive policing; the presence of off-duty police officers probably reduces the number of problems that escalate to calls for police service. In this respect, according to the Union president, the City has come to rely on off-duty officers to supplement regular policing.

Officers are prohibited from working more than 18 hours per day on a 24 -hour clock. With the current $4 / 10$ schedule, officers could work an 8 -hour off-duty job following a 10-hour police shift. In the course of one week, off-duty hours are limited to 32 hours (or 72 hours per month). In 2002, 117,192 hours of offduty service were supplied by 338 sworn staff. The greatest amount of time worked by one officer was 1,547 hours. Twenty-four officers each worked more than 1,000 hours during the year, each averaging 19.23 hours per week; 84 officers worked at least 10 hours per week.

From January to mid-May 2003, approximately 8,400 off-duty hours were worked each month. The offduty office estimates that sworn staff will work approximately 126,000 off-duty hours in 2003. Approximately 11 to 15 investigations each month are conducted into possible violations of the limit on offduty hours; most are disposed of as administrative errors. Officers found guilty of exceeding the 32-hour cap are suspended from off-duty employment for a minimum of one week.

Some Miami Beach businesses believe that employers have more need for security-trained employees than off-duty officers can fill. At this time, the City has approximately 60 permanent off-duty jobs. At least 30 percent of off-duty employers log significant off-duty work hours, requiring several officers to secure their businesses. One beach bar (Wet Willies), for example, logs over 250 hours per week. When an employer needs an off-duty officer to start on the job before that person's police shift has ended, MBPD's practice is occasionally to allow the officer to take compensatory or vacation time. However, most employers
adjust hours whenever possible to match the MBPD shift schedule; it is no coincidence that club jobs frequently start at 1:00 a.m.

Employers must submit an application to the Department with a $\$ 4.00$ administrative fee per hour before hiring an off-duty officer. Clerks record data that allows the Department to monitor the number of hours requested, the number of hours worked and the officers who work them. The fee goes into the City's General Fund. Off-duty work provides a good income for the City, as well as for its officers. In the first half of 2002, the City earned $\$ 147,000$ from administrative fees. A new sergeant in charge has focused on collections; in his first six months, he brought in close to $\$ 180,000$ in new and past due administrative fees. He believes that the demand is increasing. Miami Beach could collect between $\$ 300,000$ and $\$ 400,000$ in 2003, including collections of past due accounts.

We did not find any department with $3 / 12$ scheduling that had an off-duty workload comparable to that of MBPD. One department using the 3-4/4-3 option noted that $3 / 12$ scheduling provided its officers with more days off that could potentially be used for off-duty work. The interviewee's said that their departments do not formally track off-duty jobs, but the department believes that its officers are filling more of these positions than before the change. Another department thinks that their officers' morale dropped because the variable days off in their 3/12 scheduling option (3-2/2-3) made off-duty work less available.

From our perspective, the 3-4/4-3 option of 3/12 scheduling would accommodate off-duty work well, providing more days off. Management would need to cap and monitor the total hours officers might work over two consecutive days. To safeguard officer safety and wellness while accommodating off-duty work, we recommend that the Department resolve workload coordination and the Department's policies regarding off-duty work before proceeding.

Health and Safety. The effects of $3 / 12$ scheduling on officer safety and officer health are of concern to both management and the union. Command staff and supervisors are alert to the possibility that 12-hour shifts could contribute to officer "burnout" and increased sick leave. Tired, stressed officers are not as likely to conduct their work safely. Interviewees said that the workload in Miami Beach is especially demanding because of the area's tourism and entertainment focus. Officers stated that their work involves
working call after call, without a break, in all areas of the city (a perception common among patrol officers in most urban areas). Officers feel compelled to accomplish the agency's crime reduction goals, but calls are nearly always holding for them and they have no time to take breaks. Most reported that the hour of overlap time is needed as a break, to relieve stress. While they realize that they usually work 7 - or 8 -hour days, they believe that this is the maximum amount of stress they can handle, considering the nature and pace of the work. They believe that increasing the length of shifts is certain to increase stress, and likely to result in more sick time, accidents, complaints and lower morale for themselves and other officers. The Union president also pointed out that most officers live outside of Miami Beach, commuting up to an hour each way. Added to the longer work shift, these officers would be putting in 14-hour work-related days.

We could collect only anecdotal information about officer health and safety from interviews with departments using $3 / 12$ scheduling. In one department where interviewees expressed general satisfaction with $3 / 12$, no evidence of adverse impacts was reported. Another department reported no change in use of sick leave. One department did note that with the introduction of $3 / 12$, the agency terminated use of sick leave policy as an evaluation factor; a slight upturn in sick leave hours there was attributed to that change. Another department mentioned that officers complained that sick leave now accrued at 12 hours per day for one day of sickness, rather than at eight or even 10 hours, as before.

In the department where interviewees expressed dissatisfaction with $3 / 12$ scheduling, sick leave usage has increased 10 percent; they attributed this to stress that was related to overall personnel shortages in their department. One interviewee commented, "Now when officers have a traffic accident, the officer [blames it on being] tired from working long hours."

Prior to implementing 3/12 scheduling, baseline sick leave usage should be established in order to evaluate the potential impact of the change. In examining overtime data, we found officer shortages occurring on Sundays in particular, with no clear cause. We suspect that these spikes could be caused by officers being held over to address Saturday night/ Sunday morning night club crowds, or it could be that officers working on Fridays and Saturdays may be experiencing fatigue, thus increasing absences on Sundays. MBPD should examine this trend more closely; it may be an indicator of a potential outcome under 3/12 scheduling.

Morale. Morale is unusually high at MBPD, among all employees. All interviewees indicated that they enjoy their jobs. One supervisor said "I haven't had a job here I haven't liked." But that sense of enjoyment doesn't appear necessarily to translate into trust of the City's management. The majority of officers expressed opposition to the concept of $3 / 12$ scheduling. Some were quite vocal about this, expressing mistrust of the City's motives. According to the Union president and vice-president, they and another union member conducted an internal analysis and survey of officers on the issue. They interpreted the results to mean that union members oppose the scheduling plan. Other union members whom we interviewed questioned those results, arguing that fewer than half of all union members participated in the survey. Some believed that the $3 / 12$ proposal lacked support because of the way it was presented in roll call briefings.

Checking further, we found that of 250 union members, 83 completed the survey. Their responses were split down the middle, although those supporting $3 / 12$ scheduling did so conditionally. The Union attributes this support to some respondents' mistaken belief that $3 / 12$ scheduling is essentially a 36 -hour work week for 40 hours of pay. Adjusting the results to account for a possible misunderstanding, the Union believes its survey shows that between 60 and 80 percent of respondents oppose $3 / 12$ scheduling.

Many individuals speaking with us questioned the City's underlying motives. They expressed concern that the City would not use savings for additional police officers, continuing instead with what they call "stop gap methods" to address a growing policing workload. Many believe that five 8 -hour shifts might save the most money; therefore, they worry that $3 / 12$ scheduling could be the City's strategy for eventually returning to that unpopular scheme. From some, we heard the opinion that $3 / 12$ is "a way [for the City] to throw a bone our way, [only later to say] this [ $3 / 12$ schedule] is not working, so let's go back to the 5 -day work schedule." These interviewees fear a future loss of days off if they accept $3 / 12$ now. They were willing to work three or four consecutive days, but not five. Officers and union representatives both validated the fear by pointing out that during every contract negotiation period, the City threatens to impose $5 / 8$ scheduling. The $4 / 10$ plan has now been in place for over 24 years; some view it as a "pillar" not to be touched.

According to many who oppose the plan, it is shortsighted; they believe that the City's potential savings would come at the cost of quality policing, which in turn could again increase costs as the City is forced to address resulting problems. Some expressed concerns about the quality of individual performance on longer shifts. Drawing from his military experience, one interviewee reported that work-related complaints usually increase on 12-hour shifts. Others pointed out that fatigue sets in when working the Department's intensive Alpha-Bravo shifts.

Not only do officers have concerns about 12-hour shifts, but they are worried that the overall work week pattern will cause problems in their personal lives. Many officers chose to work for MBPD, on a particular shift, in order to accommodate family needs. The particular 3/12 scheduling option being considered is an acceptance factor, especially for those on day shifts; many believe that $3 / 12$ scheduling would interfere with family life, even with consistent days off. Officers were concerned that even if built into the plan, in practice, consistent days off would be difficult to maintain. Inconsistent days off would have a negative effect on most families, and would be extremely hard on employees with serious obligations -- for example, for divorced parents with shared custody and court-ordered child visitation schedules. Some want to be on the same schedule as other family members. Others need additional days off to earn extra income. Interviewees reported that $4 / 10$ scheduling is a key factor in MBPD's ability to attract employees from other police departments.

Some supervisors tried to construct options that might make $3 / 12$ work better. One thought $3 / 12$ would be "terrific," if an extra day off could somehow be generated; it could create savings for both officers and the city, if only from reducing commuter trips with take-home cars one additional day per week. At the same time, officers would enjoy 35 additional days off throughout the year. Another supervisor stated that working two additional hours each day was worthwhile to gain additional days off; he suggested a " $3 / 12$ and a half" hour day to achieve a 3-day, 40-hour work week. "We are ready to be unique," he asserted, reminding us that MBPD was one of the first to go to the $4 / 10$ shift over 20 years ago.

Other departments reported that the $3 / 12$ schedule was a tough sell at first, even if eventually their officers came to accept or even appreciate it. Three of four departments took enough time to introduce the concept, building acceptance gradually through meetings and problem-solving discussions. They reported
making slow transitions, allowing officers maximum flexibility along the way. One of the departments incorporated the new scheduling plan into a package of personnel policy changes that also addressed issues such as sick leave and shift rotations.

Boca Raton Police Department (BRPD) reported that at first, no one wanted 3/12 scheduling; yet now, two years later, "you couldn't tear it out of their hands." To meet their officers' differing needs, BRPD implemented different $3 / 12$ scheduling options for their day and night squads: the day shift works $2-2 / 3-3$, while the night shift works 3-4/4-3. Departments using the 3-4/4-3 option believe that the additional day off within each 2-week scheduling unit is the most attractive feature of the plan to officers; the additional day off also helps with recruitment from other departments. Combining days off with two days of vacation time, officers could periodically manage an entire week off work.

Palm Bay Police Department (PBPD) has actually solved morale problems using 3/12 scheduling. PBPD changed from a $4 / 10$ plan with rotating shifts to $3 / 12$ scheduling with permanent shift assignments. Under the new plan, only two shifts rotate, and these rotate every four months to accommodate the local college schedule. While making the change, PBPD accommodated officers for whom $3 / 12$ created problems, allowing some $4 / 10$ shifts. Initially, eight or ten officers opted out of $3 / 12$. By the second four-month rotation, only a couple of officers were still opting out. As one interviewee stated, "change takes longer for some to accept." This department was wise enough to accept and account for this reality.

PBPD interviewees reported that officer morale improved in part because more officers on the streets meant that officers were no longer being held over or denied vacation time. While on duty, officers were assigned fewer calls and had time for real problem-solving. Of course, they also enjoyed the additional day off and the stability of permanent shifts.

In the department where $3 / 12$ is not popular, the 3-2/2-3 option has been implemented. Interviewees report that this schedule prevented officers from making certain kinds of time commitments in their personal lives. For example, they could not dependably enroll in college classes, coach their children's athletic teams

[^5]or attend games, and so forth. The combination of rotating days off and frequent extended shifts in busy zones appeared to have a negative affect on family life.

Interviewees from this department thought that the 12-hour day was too long, especially in the busiest districts. The night shift is particularly unhappy with never having more than two consecutive days off. After six months of $3 / 12$ scheduling, this department is reassessing the decision. Recent surveys suggest that 50 percent of their staff are unhappy. A few interviewees think they are still in a period of transition, and morale may continue slowly to improve.

Training. MBPD recently learned through a survey that officers want more training, and this has become one of the Chief's priorities. Currently, Wednesday is the designated training day; it is an "overlap" day when more officers are on duty. Increasing training seems to have had a positive impact on morale. For this reason, the department is concerned that $3 / 12$ scheduling not interfere with training plans. Departments that use the 4-3/3-4 option offer training on their scheduled 8-hour "overlap" day. Departments with an 84hour scheduling unit (over 2 weeks) have eliminated the overlap day, and have reverted to using overtime for all training. Their officers either must request time off from regular duty or use an off-duty day to attend training; either way, they receive overtime pay for training hours.

## SUMMARY

This report provides an assessment of the costs and benefits of a $3 / 12$ work schedule. We also identify areas that should be examined in closer detail by MBPD.

First, we have gathered information on the possible types of $3 / 12$ shift schedules. We learned that some departments chose to work 84 hours during a two-week period and provide an extra day off every six weeks. Others work a modified $3 / 12$ schedule, where, on one day, officers only work eight hours. This day is often a training day. We constructed a shift schedule ensuring maximum coverage on the weekends, and compared it with the current shift schedule and minimum staffing numbers. This comparison served as a major component in our assessment of the costs and benefits of the $3 / 12$ work schedule.

However, we note that the rationale for the current patrol minimum staffing parameters is unclear. Without calls for service data, the level, type and duration of the workload for patrol officers during a typical shift are difficult to assess. We cannot determine whether the minimum staffing numbers are realistic, too low or too high ${ }^{8}$. It is clear that MBPD faces unique challenges with respect to the tourist and entertainment population swings. From the data provided on overtime, MBPD does appear to be faced with persistent backfilling, indicating a chronic shortage of personnel in relation to the minimum staffing requirements of the Department. We make this assertion based on the fact that overtime for manpower shortages has been used on over 80 percent of the days since January 1, 2003.

In the absence of this key baseline information, we have examined the potential impacts of a shift change on shift coverage, overtime costs, off-duty jobs, officer health and safety, and morale.

With a shift to the $3 / 12$, we anticipate the following changes:

- With all $3 / 12$ plans, overtime hours could be reduced and more officers could be deployed on the streets per shift. The City could pay for 24 hours per day of coverage rather than 30 hours, as it

[^6]does now. With the same pool of 144 officers, the Department could have an extra 10 to 14 officers on the street per shift.

- Supervisory positions for the patrol division can be reduced by a minimum of five sergeants under the $3 / 12$ plans. Under the $4 / 10$, at least eight squads are assigned during each shift, for a total of 24 squads. Assuming the same number of patrol officers and a maximum of eight officers per squad, the $3 / 12$ shift requires at least five fewer squads (19 squads) than the $4 / 10$ shift and therefore requires fewer supervisory sergeants.
- Calls for service during shift changes may back up or be subject to slower response times, if overlap scheduling is eliminated. A simple remedy would be to employ different shift start times, such as an hour and half delay for half of the squads.
- Overtime costs must be categorized to parse out the savings.
- Overtime for special assignments and to assure minimum staffing levels is likely to decrease with $3 / 12$ scheduling. Reducing or eliminating these overtime expenses could equate to savings of approximately $\$ 500,000$ to $\$ 600,000$ per year.
- Overtime for special events ( $58 \%$ of the total overtime costs) are not likely to change, due to continuing growth in the demand, regardless of scheduling.
- Court overtime has the potential to decrease, if court time is accounted for when implementing $3 / 12$ scheduling. However, potential savings here are difficult to estimate because of the variability and interrelatedness of evening shift schedules, court schedules and the days-off schedule.
- Officers could realize additional time for off-duty jobs, but few significant changes are anticipated.
- Departments using $3 / 12$ scheduling do not report evidence of any significant reductions in officer health and safety. Data need to be collected to determine the call load of officers to further investigate this issue.
- Morale is already good in the Department. Morale is likely to suffer an initial drop with the introduction of this change. However, other departments found that with appropriate briefings and flexible implementation, acceptance and morale recoveries are possible. MBPD would be giving up a popular work schedule to make the change; without compensatory accommodations in the new schedule, this increases the likelihood of a negative impact on morale.
- Depending on the $3 / 12$ scheduling option adopted, training that now is scheduled during an
"overlap" day could be lost. If MBPD were to use an 84-hour scheduling unit, overtime costs for training could increase.

The table below outlines these changes for variations on $3 / 12$ scheduling:

| Color Key | Comparison of 4-10 schedule to 3 options of 3-12 schedule |  |  | Negative outcome likely |
| :---: | :---: | :---: | :---: | :---: |
|  | No change | Positive Outcome/ Improvement likely | Caution: Outcome Unclear |  |
|  | Status Quo ( 4 days, 10 hour shifts) | 2 on 3 off, 3 on, 2 off schedule ( 84 hours) | 3 on, 4 off, 4 on, 3 off schedule (84 hour) | 3 on, 4 off, 4 on, 3 off schedule with 8 hour day (80 hour) |
| Manpower | No change | More manpower per shift | More manpower per shift | More manpower per shift |
| by the City | 30 hours per day | 24 hours per day | 24 hours per day | 24 hours per day |
| Shift Change Coverage | No change | Depends on roll call policy and use of hour delay in arrival times for shift | Depends on roll call policy and use of hour delay in arrival times for shift | Depends on roll call policy and use of hour delay in arrival times for shift |
| Health | No change | No change based on experiences of other departments | No change based on experiences of other departments | No change based on experiences of other departments |
| Safety | No change | No change based on experiences of other departments | No change based on experiences of other departments | No change based on experiences of other departments |
| Overtime costs |  |  |  |  |
| - Special Event OT (58\%) | Likely to continue to increase | Likely to continue to increase | Likely to continue to increase | Likely to continue to increase |
| $\begin{aligned} & \text { - Special Assignment OT } \\ & (13 \%) \end{aligned}$ | No change | Potential to Decrease | Potential to Decrease | Potential to Decrease |
| - Manpower shortage OT (11\%) | No change | Decrease | Decrease | Decrease |
| - Court OT (14\%) | No change | Depends on scheduling for Monday and flexiblity with night shift hours. | Depends on scheduling for Monday and flexiblity with night shift hours. | Depends on scheduling for Monday and flexiblity with night shift hours. |
| Off-Duty work | No change | More opportunity for details | More opportunity for details | More opportunity for details |
| Morale | No change | Likely to decrease due to rotating days off | Likely to increase due to extra day off based on experiences in other depts | Likely to increase due to extra day off based on experiences in other depts. |
| Training | No change | Possible increase in overtime costs | Possible increase in overtime costs | No change |

## RECOMMENDATIONS

$21^{\text {st }}$ Century Solutions, Inc. recommends that the Miami Beach Police Department continue its current scheduling plan until it can collect and analyze data documenting calls for service and incident data. A baseline to clearly understand the workload and busy time periods is necessary before making a shift to a 3/12 work schedule. In addition, we would recommend using these data to examine the workload faced by sergeants, prior to reducing the level of supervision in the patrol division or re-assigning them to other duties.

At the same time, the routine use of overtime to compensate for officer shortages and to accomplish special assignments is cause for serious concern, and in Miami Beach, the problem is compounded by the growing number of special events and requirements requiring policing in the city. A 1998 National Institute of Justice Research Brief on overtime tells us that "reliance on overtime may have harmful consequences that are not sufficiently considered by police managers, such as exhaustion on the part of officers, unwillingness to provide any services without tangible reward, increased antagonism between supervisors, and line officers and the undermining of professionalism. ${ }^{\ominus}$

If MBPD opts to consider a $3 / 12$ shift, we recommend they implement a flexible schedule, allowing maximum involvement of patrol officers and the union in the planning phases.

[^7]
[^0]:    ${ }^{1}$ With $4 / 10$ scheduling, the City is now paying for two overlap hours (double coverage) per officer during each of three shift changes. As a result, coverage is needed for the equivalent of a 30-hour day.

[^1]:    2 "Miami Beach Market Study", City of Miami Beach Economic Development Department, July, 2002.

[^2]:    ${ }^{3}$ LRIS conducted a national mail survey of municipal agencies that service populations greater than 50,000 and counties with populations over 100,000. Data are in tabular form, and include shifts worked per week, hours per shift, alternate patrol schedules, population, number of sworn officers and overtime budgets, and other factors.

[^3]:    ${ }^{4}$ We could not confirm the existence of such an FBI formula nor otherwise trace the origins of the minimum standard used by the Department.
    ${ }^{5}$ According to information from the 2001 Law Enforcement Work Shift Survey, 2003, LRIS (Labor Relations Information Systems) and our respondents.

[^4]:    ${ }^{6}$ The altered schedules involve working 4 on, 3 off, 3 on, 3 off, 3 on, 5 off.

[^5]:    ${ }^{7}$ It should be noted that this department moved from a 5-day / 8-hour schedule to $3 / 12$ scheduling.

[^6]:    ${ }^{8}$ MBPD officers do maintain hand written logs of their activities that could be used as a proxy for this information in a future analysis.

[^7]:    ${ }^{9}$ Bayley, David H. and Robert E. Worden, "Police Overtime: An Examination of Key Issues," NIJ Research in Brief, 1998.
    $21^{\text {st }}$ Century Solutions, Inc.

