

By TOM TOPOUSIS

As downtown braces for an onslaught of construction, The Post got a first look at the battle plan being drawn up to keep the massive building projects rolling.

Within two years, lower Manhattan's skyline will become a maze of tower cranes and steel girders, while workers closer to the ground tear up streets, knock down damaged buildings and rebuild the below-ground transit system.

"This is one of the single largest urban programs ever undertaken in America," said Charles Maikish, who has to coordinate the dozens of massive projects as executive director of the Lower Manhattan Construction Command Center.

"The challenge here is to do it and preserve the vitality of lower Manhattan," Maikish said.

Maikish and his team of engineers and planners are now putting the finishing touches on a plan to coordinate the enormous amount of construction work while at the same time keeping the nation's third-largest business district open.

The plan will coordinate the arrival of 3,000 concrete trucks a month, delivery of enough steel to build the Empire State Building six times over and the arrival of 7,000 construction workers every day.

"Lower Manhattan's resurgence is being forged in concrete and steel," said Gov. Pataki, adding that the projects will "ensure that downtown is positioned as the premier 21st-century central business district."

Altogether, \$20 billion of construction will take place downtown over the next six years. The World Trade Center, PATH station and the 9/11 Memorial and Museum alone will account for half of that construction budget.

"It's unprecedented," said City Councilman Alan Gerson, a Democrat representing lower Manhattan whose primary concern is having an independent monitor to watch for potential environmental problems from all the work. Gerson said he's considering action by the City Council to get such an independent monitor.

Much has been made about the 10 million square feet of office space that will be built, but developers are busy with a residential boom that will boost downtown's population by 40 percent over the next four years during the height of construction.

Planned residential towers will add at least 8,000 apartments and condos by 2010, including five buildings slated for Battery Park City and two more across West Street at Chambers and Warren streets.

The project will tax the limits of the city's bridges, tunnels, highways and streets — not to mention the patience of 240,000 people who commute to work in lower Manhattan every day and the 36,000 who call it home.

To keep traffic rolling, the command center will create a satellite office of the city's Long Island City traffic center in lower Manhattan, where they can make immediate adjustments to traffic patterns as problems arise.

Maikish said his group is working with builders to set up staging

Downtown's construction blitz ready to move onward — and upward

Lower Manhattan will undergo a \$20 billion rebuilding project over the next six years. Here's what it will take:

- 2 million** cubic yards of concrete
- 200,000** concrete-delivery trucks
- 360,000** tons of steel
- 15,000** construction workers
- 34** tower cranes
- 30** mobile cranes
- 124** building hoists

■ **Excavation:** Digging an 80-foot-deep bathtub for three World Trade Center towers alone will fill 2,000 dump trucks a day at the height of the 18-month project.

■ **Streets:** Nearly every street south of Chambers will be rebuilt, repaired or realigned.



Thirty-four massive tower cranes will be needed — four alone at the Freedom Tower — to feed materials to the skyscrapers.

While much of the work will be heading skyward, one of the largest construction projects is digging a massive, 80-foot-deep foundation for three office towers slated for the World Trade Center's Church Street Corridor, beginning by summer.

That project will involve 2,000 trucks a day to haul off the rubble.

Moving pedestrians through the work sites is another challenge, with plans to reroute commuters over bridges and skyways where needed.

Maikish said the command center's main mission is to make sure that each project, public or private, is coordinated through a central agency.

"We've got to get materials in, the labor force in and heavy equipment in. It's an enormous job," Maikish said.

areas for construction workers so that they won't all try to drive into lower Manhattan.

Lower Manhattan's voracious appetite for concrete will kick in about six months from now, and at its peak, the downtown projects will consume 3,000 truckloads of concrete a month from plants in Brooklyn and Queens.

Maikish said the command center will have to coordinate with the Department of Transportation

and the Police Department to make sure those trucks can reach their destinations within 30 to 45 minutes. Any longer and the concrete is ruined.

The trucks will roll in over the Manhattan Bridge or through the Brooklyn-Battery Tunnel, unless Maikish and his engineers can come up with a plan to build a temporary mixing plant downtown to speed the flow of concrete.

Engineers are studying an alternative plan to mix concrete at a temporary plant in lower Manhattan to speed delivery, but that would likely have to delay construction of parts of the Hudson River Park, the only site that is potentially suitable.

Maikish said his agency has been working with contractors to line up heavy equipment, competing with projects in the Gulf Coast.