

## DES MOINES PUBLIC WORKS DEPARTMENT

### Iowa's capital city is in good hands with experienced and well-trained team

**B**ill Stowe might have picked a better time to begin his tenure as head of the Des Moines Public Works Department. Stowe started his term as public works director in January, 2001, which was the middle of one of the toughest winters Iowa has experienced in recent years.

"Last winter was a rough one for us," admitted Stowe, who leads Des Moines' 550-employee Public Works Department. Stowe and his team of managers — Deputy Public Works Director Pat Kozitza, Street Maintenance Administrator Bruce Braun, Sanitation Administrator Lee Boisen, Sewer Operations Manager Jay Bennett and Fleet Services Administrator Dave Bair — are responsible for Iowa's capital city's streets, sanitation and sewer services, as well as the huge fleet of equipment needed to maintain those services.

"It took a lot of good coordination and hard work," Stowe continued. "That was a very difficult emergency response under record days of snow

cover here. And Bruce and Jay and Lee and others pulled us through."

But Stowe did find something good about taking on a new job in the middle of a snow emergency. "It tested us and we're now more ready for a hard winter than we have been in previous years."

#### Team effort

Stowe was appointed head of the Public Works Department after working there for 18 months. "I reported to the city manager with responsibilities for our waste water treatment plant," he said. "At the same time I was learning from the department managers about what they did concurrent with former public works director John (Bellizzi)'s tenure as public works director." Stowe succeeded Bellizzi, for whom the public works building is now named.

Stowe's deputy director is Pat Kozitza, who helps the division administrators and managers coordinate their efforts. "Pat is a crucial person in getting these guys together at the beginning and end of each week to talk about what the major projects are and what coordination is necessary," Stowe stated.

"Bruce's guys are paving a street, so Lee's folks need to know about it so they can collect trash hopefully in front of the paving process," he explained. "Or if Jay is going to be out working on an intake, he wants to know where Bruce is paving streets. There are just a lot of pieces to be coordinated on a day-to-day basis."

In addition to coordinating projects so they don't interfere with each other, the divisions also make efforts to share resources. "If one manager has a piece of equipment or personnel that someone else needs, we all work together and share those resources to accomplish our objectives for that day or that week," said Stowe.

City of Des Moines Public Works Director Bill Stowe (middle) is flanked by (from left) Deputy Public Works Director Pat Kozitza, Fleet Services Administrator Dave Bair, Sanitation Administrator Lee Boisen, Street Maintenance Administrator Bruce Braun and Sewer Operations Manager Jay Bennett.





An operator for the city of Des Moines Public Works Department uses a Komatsu WA250-3 wheel loader on a street reconstruction project.

Teamwork is most noticeable “when we get into an emergency situation,” Stowe continued. “When there’s a snowstorm or a flood or a windstorm, everybody gets together and we work as one. There is no division between sewer, sanitation or streets at that point. The city is in good hands, and not just those of the division managers, but those of the 150 people behind each of us as well.”

## Five links

Stowe listed the “five links” he and his team are responsible to keep up and running. “The streets, sewers, sanitation, the treatment plant and the garage are the five major links of this process,” he noted. “They all come with a variety of needs, from infrastructure maintenance to management needs, and each specialty has a host of equipment associated with it.

“The Public Works Department has responsibilities for hundreds of miles of collection system in the city of Des Moines for our 200,000 residents,” said Stowe. “That includes the treatment of waste water that goes to a regional facility serving not only Des Moines, but all of our Des Moines-area suburbs as well — West Des Moines, Windsor Heights, Urbandale, Pleasant Hill and seven others. That’s about 450,000 customers on the waste water side.

As sewer operations manager, Jay Bennett is in charge of managing the collection system and the waste water treatment plant. “Between the sanitary combined and the storm, it’s close to 1,200 miles of pipe in the ground,” said Bennett, a 23-year veteran who started off his career as a garbage collector for the city. Before he became sewer operations manager, Bennett managed the waste water treatment plant’s maintenance program. “It was just kind of a logical choice to move up the pipe, so to



RMS Territory Manager Ron Mason stands next to Elgin Pelican Series P sweepers. The city of Des Moines Public Works Department utilizes a fleet of 10 Pelican sweepers to keep city streets clean.

speak, from the treatment plant to the collection system,” he noted.

## Public perception

“The biggest issue we deal with in the sewer department is the public perception that there’s no problem with the sewer — at least until they either have a backup in their basement or they have to drive through a pond area that overflowed from the storm sewers,” stated Bennett.

“We also maintain 52 lift stations around the city,” he continued. “Most of those are on the sanitary side, but they’re getting to where they’re split pretty evenly now, because there are pump stations that move sewage waste water from one area of town all the way across the city and sometimes across the county to a treatment facility.

“That’s the challenge,” Bennett noted. “The majority of the sewers are older — we have some that date back to 1929. It’s not only handling the sanitary, but also the storm water drainage. They’re the biggest problem, and the amount is so great that you can’t address everything you want to within a five- or 10-year plan. Our biggest issue is trying to maintain that within budget constraints.”

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# Dedicated crews keep Des Moines clean

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## From arterial to gravel streets

"Bruce Braun is responsible for about 200 arterial miles and about 600 residential miles of streets," continued Stowe. "Maintenance of the road system is his primary responsibility, but he also works closely with our engineering department in the design of new streets. And we have road systems that vary from arterial heavily trafficked downtown urban central business district streets to unpaved streets that are basically gravel."

Snow collection also falls under the streets division's responsibility. "We have broken down our operations into two 12-hour shifts with staffing pretty much equally divided," Stowe explained. "We are a little heavier on the nighttime operation, because we feel we can get more done with fewer cars on the streets."

Braun noted that his division is partnering with contractors to repair streets. "The most challenging thing is getting the streets repaired that need repair with the funding available," he stated. "To accomplish that, we have taken it upon ourselves to do some of the construction work in-house that is normally contracted. And we also work jointly with a contractor. We will have our in-house crews do the work that is labor-intensive, but we don't have the specialized equipment to do some of the other things, so we hire a contractor for that."

Braun is concentrating his in-house construction crews on three areas. "For concrete pavement restoration, we provide traffic control, notify the residents, remove the pavement and prepare the base," he explained. "Then the contractor comes in, pours the concrete and finishes the sealing and curing."

"We do what we're good at, they do what they're good at, and that works well," Braun continued. "In the last few years we've also extended that procedure to our sidewalk replacement program. It's worked out well for us."

Braun has been Des Moines' streets maintenance administrator for 14 years. His background includes working for the regional Department of Transportation on its freeway building projects, and holding positions with a private construction company, the Army Corps of Engineers and state engineering agencies.

## Customer-oriented

Sanitation Administrator Lee Boisen oversees residential garbage collection for 66,000 households, as well as forestry operations for the city of Des Moines. "We have 65,000 public trees in the city that are our responsibility," commented Stowe. "Lee is also responsible for street cleaning, which is a 24-hour-a-day operation."

"Solid waste is very customer-oriented," pointed out Boisen. "We touch every household once a week, so we make contact with almost every citizen on a weekly basis. And with the number of programs we have going, we try to be cost-effective. We have the curb recycling program, the yard waste program, property cleanups, right-of-way cleanups, so we try to juggle our dollars to keep our user fees low."

Boisen noted that the city runs 17 solid waste routes and eight recycling routes each day. "Then we have combined trucks, we have the street sweeping crew and the forestry crews," he added. Boisen joined the city's engineering department in 1972 and moved to the Public Works Department in 1982.

## Huge equipment fleet

It takes a huge fleet of equipment to service Des Moines' street, sewer and sanitation needs. Fleet Services Administrator Dave Bair oversees a two-shift operation of 50 mechanics who maintain the city's 1,600 vehicles. "We have 730 pieces of equipment," said Stowe, referring to the streets, sewer and sanitation divisions.

Many of those pieces are Galion motor graders, Komatsu wheel loaders, Elgin street sweepers and Vactor jet vacuum trucks purchased from Road Machinery & Supplies Company. RMS Territory Manager Ron Mason services the Des Moines Public Works Department account.

"One of the most important things to us is the service from the dealer providing the equipment,"



One of seven Vactor jet vacuum trucks used by the city of Des Moines.



The operator of a Galion 850 motor grader grades a new road on East 38th Street in Des Moines.

stated Stowe. “Are they there only when they’re selling you a piece of equipment, and then you never see them again until you have another piece of equipment coming up for bid, or are they around and trying to help out?”

Braun’s street crews use the 12 Galion motor graders the city purchased from RMS for road rehabilitation, road building and snow removal. “The operators like the torque converter instead of having to use a clutch,” noted Stowe. “And they’ve held up very well for us.”

Boisen’s sanitation division uses two Komatsu WA250-3 wheel loaders, although they are often used by the street division.

Boisen’s street cleaning crews use 10 Elgin Pelican Series P three-wheel mechanical sweepers to keep Des Moines’ streets tidy. “That type of sweeper actually works most efficiently for us,” Boisen stated. “Particularly in the leaf season for picking up leaves and the sand. It does the best job with compacted material and wet leaves.”

“We also use them heavily for cleanup after our surface milling projects,” added Stowe. “We have material left that the conveyor doesn’t pick up. We use the Elgins to clean up better.”

### Versatile jet vacuum trucks

The city’s fleet also includes several Vactor jet vacuum trucks purchased from RMS. They are used for “the preventive maintenance deflection system, for the jet routing or cleaning of the basins,” explained Stowe. “We also support construction needs, such as sucking water out of an excavation after a rainstorm so Bruce can proceed with his work.



The city of Des Moines Public Works Department has a fleet of 12 Galion motor graders that are used for everything from snow removal to road building and rehabilitation.

“We’ve also gotten into some spill incidents where you drive down along the curb and vacuum the spill up, which works nicely,” he continued. “And we’ve applied them as trenchless technology, using them as boring machines or jet routers. The Vactors have been pretty versatile pieces of equipment for us.”

### Resources to meet needs

Bill Stowe said the most challenging aspect of his job as public works director is “dealing with an infinite number of needs with a finite number of resources.” Aging infrastructure and growing suburbs continue to put more pressure on Des Moines’ street, sanitation and sewer systems. Stowe and his team work with the city council to best use the resources available in a fair and efficient way.

“We believe the key is how you deliver the service,” concluded Stowe. “If we can be responsive to citizens, be responsive to the council, and be responsive to the policymakers who we all deal with, we’ll continue to be treated well in the appropriations process.”