

City gears up for Y2K challenge

Y2K

Photo by Carole J. Arnold



Y2K has a lot of people in a tizzy as they ponder: what's going to happen after the clock strikes midnight on New Year's Eve?

Will computers realize it's Jan. 1, 2000, or think it's Jan. 1, 1900?

By Lisé Chandler White

The countdown has begun and Y2K—the “Y” stands for year, and “2K” equates to 2000—is fast approaching. Our computer-dependent society is calling the Millennium Bug “the problem of the century” and guarding for worst-case scenarios.

“The entire dilemma is nothing more than a shortcoming in the storage of calendar data,” said David Sullivan, Director of Information Technology for the City of Virginia Beach. When people started using shorthand to write dates, he explained, there were no computer systems. And when computer programmers started to create formulas, every byte of data was very expensive to store. To save money, two digits were used instead of four to represent a year.

“It seemed like a great idea at the time,” Sullivan said, and the turn of the millennium was far enough into the future that the possible impact of those cost-effective programs was nowhere in sight.



Photo by Carole J. Arnold

David Sullivan
Director of Information Technology

“This simple problem can affect any hardware or software that creates, stores or uses two-digit calendar data,” Sullivan continued. “And in each case, the misinterpretation of the year 2000 can bring about a variety of results, from embarrassing calculations to full-fledged crashes.”

How Y2K Affects the City and Its People

Like most other enterprises, the City of Virginia Beach is heavily dependent on computers.

The City’s vast computer resources include servers and networks, specially designed mainframes and programs, and more than 3,000 personal computers. Embedded systems, with computer chips housed in mechanical devices, control or affect police, fire and rescue vehicles, water and sewer pump stations, security, lighting, heating and air conditioning systems, and traffic signals, to name a few.

If nothing were done to prepare for Y2K, there is a chance that some operations might not function as expected and instead of knowing that it is Jan. 1, 2000, some systems might think it’s Jan. 1, 1900.

“Not too bad if you’re pumping water or changing a traffic light,” Sullivan poses, “but what if you receive a tax bill after Jan. 1, 2000 showing that you owe back taxes for 100 years?” There are countless scenarios waiting to happen if they are not identified and action taken to correct them.”

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Slide this page out and SAVE IT until Year 2000

SPECIAL PULL-OUT SECTION

Y2K

Full Speed Ahead

"We've initiated a concerted effort to examine the potential for problems throughout City government and do something about it now—before it's too late."

David Sullivan
Director of Information Technology
City of Virginia Beach

YEAR 2000 Readiness Disclosure

The Year 2000 readiness statements made by the City of Virginia Beach are designated as a 'Year 2000 readiness disclosure' within the meaning of the Year 2000 Information Disclosure Act.

For the past two years, the City of Virginia Beach has been preparing for Y2K head-on.

"City leaders understand the importance of this issue," said Sullivan, one of the foremost Y2K authorities in the region. "We've initiated a concerted effort to examine the potential for problems throughout City government and do something about it now before it's too late."

As an appointed member of the Local Government Advisory Committee of the former Virginia Council on Information Management, Sullivan gained valuable insights to help municipalities throughout the state elude Y2K-related crises. He currently serves on Governor Gilmore's new Council on Technology Services, which is chaired by Virginia Secretary of Technology Donald Upson.

"The scope of Y2K is international," Sullivan said. "We must begin with our own community and region to ensure compliance and thus a continuing flow of business, goods and services."

Here in Virginia Beach, the City has developed an action plan to verify and, where necessary, correct every computer program used in providing services to Virginia Beach citizens, businesses and visitors. This enormous task is divided into five phases: awareness, assessment, renovation, validation and implementation.

"We are putting all systems under a microscope and thoroughly looking at every angle so that the City of Virginia Beach will be Year 2000-compliant before Jan. 1," said Roz Jones, who was contracted to organize and manage the City's Y2K activities.

To address systems at the department level, a Year 2000 Team comprised of technically skilled representatives from every City department or agency was established. This team conducted a massive inventory of all known systems and programs and

decided: what do we need to do to make sure we're ready for Year 2000? Of the items that need upgrading, what should come first?

Working on a schedule, department directors are using detailed checklists to make sure that no stone goes unturned. They are developing plans to identify any glitches which may pop up on Jan. 1, and to function in spite of any that may result.

Already, software and hardware for mainframe and most mission critical systems have been upgraded or designated for replacement or renovation.

Embedded systems with computer chips have been inventoried, and the millennium readiness has been assessed. The City is currently in the process of upgrading, renovating or replacing those of issue.

And that has cost about \$2.5 million, said Sullivan, who expects that another \$200,000 to \$300,000 will be invested for Y2K compliancy through the end of the year. Those figures are not at all inflated by expenditures that have been made to keep up with technology, he explained. For instance, a \$3.5 million computer-aided dispatch system, the \$4.5 million police car mobile data terminals, and the City's \$2.5 million finance system were Y2K compliant at the time of purchase, however they were not purchased because of Y2K concerns.

In addition to the review of its own technologies, the City is working with

"What if has to be asked at every turn so that emergency response, public utilities, accounting and other City services can be delivered under any circumstances, and that takes tremendous foresight."

Mark Marchbank
Deputy Coordinator of
Emergency Operations,



Roz Jones

private sector business partners and vendors to make sure they are prepared for Year 2000 as well.

"Our files contain over 17,000 entries related to services and products purchased," Jones said. "As part of our due diligence process, the critical sup-

pliers are being identified and contacted to make sure our service to the public is uninterrupted."

Because we live in an interactive world, the

potential for a variety of emergency conditions related to Y2K is real and extends beyond the City limits and beyond our control. To be ready for any problems, the City's Office of Emergency Management, a unit in the Fire Department, is working with Jones to develop a comprehensive City-wide Y2K Contingency Plan.

"What if has to be asked at every turn so that emergency response, public utilities, accounting and other City services can be delivered under any circumstances, and that takes tremendous foresight," said Mark Marchbank, the Deputy Coordinator of Emergency Management who guided the City's recovery from Hurricane Bonnie last year. "While we can't actually see into the future, we have to prepare as we would for a natural disaster. If a hurricane was in the forecast, you'd take steps to weather the storm. And that's how we are approaching the new year."

This summer, look for community meetings—public forums where you can talk with City officials and get the latest on the Y2K situation.

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Mark Marchbank



James K. Spore
City Manager

"The health and safety of our citizens is our prime concern."

said City Manager James K. Spore. "We're taking every step to ensure that critical services will be in full operation in Year 2000 and beyond."

For more information, call 563-1700; visit the City's website: www.virginia-beach.va.us; or write to Roz Jones, Year 2000 Coordinator, City of Virginia Beach, 2405 Courthouse Dr., Room B10, Virginia Beach, VA 23456.

For more on the City's Y2K preparedness and for tips on how you can be ready for the Year 2000, be sure to pick up the summer edition of *Beach Advisory*, available on news racks in early July.

See 'WHY-2K' on Channel 48

Be sure to watch "Why-2K," a video which is airing on VBTV on Cox Cable Channel 48. The program, produced by the City's Video Services Department, explains Y2K, describes how it might affect viewers, details what the City is doing to prepare for it, and presents common sense steps viewers may take to protect their personal assets.

"Once people know about Y2K and the potential problems it can cause, they can become proactive problem-solvers," said VBTV Producer Matt Cernigliaro.

During May, Mayor Meyera E. Oberndorf will host a Y2K panel discussion on "City Dialogue," which is slated to debut May 3. The City Dialogue question-and-answer panel will feature David Sullivan, Director of Information Technology, Fire Chief Gregory Cade and Director of Public Utilities/Public Works Clarence Warnstaff.

Viewers may obtain more information about these televised programs by visiting the VBTV web page at www.virginia-beach.va.us/services/video.home.htm, or by checking the Sunday Beacon for VBTV scheduling information, or by calling 427-8047.

Monday	8:30 a.m., 3:30 p.m., 9:30 p.m.
Wednesday	...	8:30 a.m., 3:30 p.m., 10:30 p.m.
Thursday	...	7:30 a.m.
Friday	7:30 a.m., 5:30 p.m., 10:30 p.m.
Saturday	8:30 a.m., 3:30 p.m., 10:30 p.m.
Sunday	7:30 a.m., 5:30 p.m., 10:30 p.m.



This listing reflects regular air times; however, programs may be preempted for live telecasting and rebroadcasting of public meetings, hearings and special events.

The American Red Cross publishes a "Y2K: What You Should Know" preparedness brochure. Here are some excerpts, which are also available online at the Red Cross website: [www .redcross.org/disaster/safety/y2k.html](http://www.redcross.org/disaster/safety/y2k.html)

Y2K WHAT YOU SHOULD KNOW

For more than 100 years, the American Red Cross has been at the cutting edge of disaster relief activities, helping people prevent, prepare for, and cope with disasters and other emergencies. That's why your Red Cross has published the following information about "Y2K"—its potential effects and what you can do to be prepared.

FREQUENTLY ASKED QUESTIONS

Q. When could Y2K problems happen?

A. Most people anticipate Y2K problems may happen December 31, 1999, at midnight. Many experts predict that the problem is more likely to be a persistent one over a few years rather than a single "crash."

For example, there may be a computer-based problem with other dates, such as April 9, 1999, which is the 99th day of the year, or on 9/9/99. In the past, a series of nines was used to indicate termination of a computer program, and some experts believe that when all nines show up in a date sequence, some computer systems could read it as a program termination command. There also is some concern regarding fiscal year 2000 dates in those organizations with fiscal years that start earlier than December 31, 1999. Also, the year 2000 is a leap year, and the leap year date 02/29/00 may be a problem for some computer programs as well.

Q. What kinds of things could happen as a result of Y2K problems?

A. The President's Council on Y2K Conversion, established by the White House, as well as a special Senate Committee, have focused their attention on defining the scope of the Y2K problem. Hearings have been conducted by the United States Senate Special Committee on the Year 2000

Technology Problem and have focused on the following eight areas: Utilities and the national power grid; International banking and finance; Health care; Transportation; Telecommunications; Pension and mutual funds; Emergency planning; General business.

The potential effect of the Y2K technology problem on any of these areas is unknown, and the situation continues to change as federal, state, and local governments; industries; businesses; and organizations, as well as the general public, take actions to reduce the problem. Experts who spoke at the Senate hearings believe that there may be localized disruptions. For example, in some areas, electrical power may be unavailable for some time. Manufacturing and production industries may be disrupted. Roads may be closed or gridlocked if traffic signals are disrupted. Electronic credit card transactions may not be processed. Telephone systems may not work.

The American Red Cross helps people prevent, prepare for, and respond to emergencies. We're in your neighborhood every day, providing disaster preparedness information and teaching classes in first aid and other lifesaving skills, to help keep families like yours safer. For more information, please contact your local American Red Cross.



American Red Cross
We'll be there.

Tidewater Chapter
611 W. Brambleton Ave
Norfolk, VA 23510-1004
Phone: 757-446-7700
Fax: 757-623-5747

Note: This information is provided as guidance only; it is not legal advice.

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The 6 Phases of Y2K Readiness: Step By Step

1. **Awareness** - Information Technology Department launches a campaign to ensure that City staff is Y2K conscious and responsive.

2. **Assessment** - Is a system Y2K compliant? If not, how do we get it there?

3. **Renovation** - Y2K compliant hardware and software is upgraded, renovated or replaced.

4. **Validation** - Once corrected, a system is tested to make sure that it works.

5. **Implementation** - Once test results are in, the system is declared as ready for the turn of the millennium or, if needed, tweaked.

6. **Contingency** - How will we respond if things don't go as planned?

This pull-out section was sponsored by the Virginia Beach Department of Information Technology.

SPECIAL PULL-OUT SECTION

Y2K

Because no one can be certain about the effects of the Y2K problem, the American Red Cross has developed the following checklist for you. These are some easy steps you can take to prepare for possible disruptions. All of these recommendations make good sense, regardless of the potential problem.

WHAT YOU CAN DO TO BE PREPARED Y2K Checklist ✓

___ Check with manufacturers of any essential computer-controlled electronic equipment in your home to see if that equipment may be affected. This includes fire and security alarm systems, programmable thermostats, appliances, consumer electronics, garage door openers, electronic locks, and any other electronic equipment in which an "embedded chip" may control its operation.

___ Stock disaster supplies to last several days to a week for yourself and those who live with you. This includes having nonperishable foods, stored water, and an ample supply of prescription and nonprescription medications that you regularly use. See Your Family Disaster Supplies Kit for suggestions.

___ As you would in preparation for a storm of any kind, have some extra cash on hand in case electronic transactions involving ATM cards, credit cards, and the like cannot be processed. Plan to keep cash in a safe place, and withdraw money from your bank in small amounts.

___ Similar to preparing for a winter storm, it is suggested that you keep your automobile gas tank above half full.

___ In case the power fails, plan to use alternative cooking devices in accordance with manufacturer's instructions. Don't use open flames or charcoal grills indoors.

___ Have extra blankets, coats, hats, and gloves to keep warm. Please do not plan to use gas-fueled appliances, like an oven, as an alternative heating source. The same goes for wood-burning or liquid-fueled heating devices that are not designed to be used in a residential structure. Camp stoves and heaters should only be used out of doors in a well-ventilated area. If you do purchase an alternative heating device, make sure it is approved for use indoors and is listed with the Underwriters Laboratories (UL).

___ Have plenty of flashlights and extra batteries on hand. Don't use candles for emergency lighting.

___ Examine your smoke alarms now. If you have smoke alarms that are hard-wired into your home's electrical system (most newer ones are), check to see if they have battery back-ups. Every fall, replace all batteries in all smoke alarms as a general fire safety precaution.

___ Be prepared to relocate to a shelter for warmth and protection during a prolonged power outage or if for any other reason local officials request or require that you leave your home. Listen to a battery-operated radio or television for information about where shelters will be available.

___ If you plan to use a portable generator, connect what you want to power directly to the generator; do not connect the generator to your home's electrical system. Also, be sure to keep a generator in a well-ventilated area—either outside or in a garage, keeping the door open. Don't put a generator in your basement or anywhere inside your home.

___ Check with the emergency services providers in your community to see if there is more information available about how your community is preparing for any potential problems. Be an advocate and support efforts by your local police, fire, and emergency management officials to ensure that their systems will be able to operate at all times.

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Talk about it

The Summer 1999 edition of *Beach Advisory* will have more information on the Y2K challenge. Talk about it with your neighbors. Read up on the issue—the Virginia Beach Public Library system has books and other resources that will put you in "the know." Chat with your children and your parents about it. Strike up a Y2K conversation with the person behind you in the check-out line at the grocery store, the library or the video store; or at the laundromat, the rec center, the neighborhood park

or on the beach. The Cape Henry Shores Civic Association has been discussing potential Y2K-related scenarios and contingencies. Why not bring it up at your next civic group meeting?

As a Virginia Beach resident, I'm pleased with the due diligence that City Council and City Staff Members are putting into Y2K compliance. Virginia Beach is, without a doubt, *the* Community for a Lifetime.

— *The Editor*

Signs to change Interstate-264 unveiling

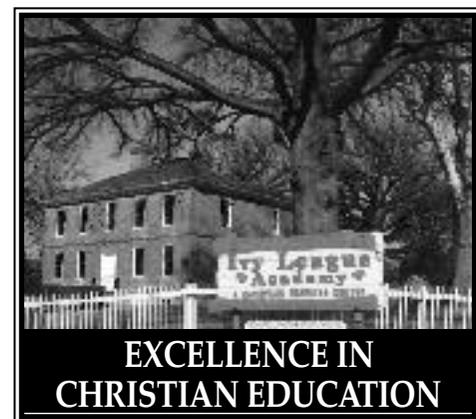
A ceremony to officially mark the change from Route 44 to Interstate 264 is being planned for Thursday, May 6 at 11 a.m. at the Virginia Beach Visitor Center. The Virginia Department of Transportation (VDOT) will begin replacing the "Norfolk-Va. Beach Expressway" signs with the I-264 signs on May 3 and plans to have them complete by Memorial Day.

The "Route 44" signs will remain up until early in the year 2000 to allow time for a smooth transition. The designation of Route 44 as an Interstate will have many economic benefits for our City and will help tourists locate us more easily. Due to its impact on directing tourists to our region, the ceremony is being planned to coincide with National Tourism Week.

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