



Welcome
to the 2011 EPB
Annual Report



The Year of the Storm





Section 1.1

Sometimes, a year can be measured in a week. The fiscal year of 2010-11 came to a moment of clarity on April 27, 2011 as the largest recorded tornadic storm in U.S. history swept across the Southeast – leaving devastation in our community beyond anything that EPB has seen in our 76-year history.

Multiple tornadoes raged through the area, claiming lives, destroying homes, sweeping businesses away. Winds of more than 160 mph took down thousands of trees, and with them 1,130 utility poles, 415 transformers and 58 miles of wire. 129,000 homes and businesses – three quarters of our service area – were left in the dark.

In the week following the storms, we saw new depths of compassion shared throughout our company and our community. EPB employees went into action, bringing professional expertise and, in many cases, simply helping hands to lighten the load of field crews – including more than 300 crews that rolled in from 18 states. Everywhere we looked, people were rising to the occasion, working shoulder to shoulder to help put the pieces back together.

As our community began to clear the rubble, we began rebuilding infrastructure. Hour after hour, home after home, we were able to restore power in record time. It was a snapshot of our work, of our commitments, of our mission in action.

Photo 1.1

When nine devastating tornadoes swept through Chattanooga, two-thirds of the homes and businesses in our service area were without power.





Section 1.2

After the morning storms blew through, we received a call from Motor Wheel, a Chattanooga foundry. When they lost power, more than \$1 million of melted steel was in their molds. They had two hours before the steel set, forcing the foundry to close down for weeks.

In restoration situations, we always go to the most densely populated areas first, where the most people are affected. But in special circumstances, when livelihoods and major losses are at risk, we can go out of the way to help. We found crews in the area, who were able to restore power to Motor Wheel, with twenty minutes to spare.

That night, Mayfield Dairy called to say that more than \$1 million in ice cream was in danger of spoiling. Our crews and contractors were already spread out across the system, so we talked the customer through scouting the problem, pulled the right equipment and sent supervisor David Simons to the site. After power was restored, Mayfield sent a huge cooler of ice cream to EPB as a thank you – so crews could enjoy a tasty treat during long hours of work.

Photo 1.2

We helped keep the steel from hardening and the ice cream from melting – and brought thousands of people back online in record time.







Section 1.3

Shortly after the storms hit, our CEO Harold DePriest and Executive Vice Presidents David Wade and Greg Eaves were in Apison, surveying the devastation. Trees were down everywhere. Buildings were completely gone, disappeared. People were out in full force – anyone with a chainsaw or a pickup truck was hard at work clearing limbs and smashed buildings. Strangers and neighbors alike, helping each other.

And in the middle of it all were EPB bucket trucks, their buckets high above the ground. Our people, raising wires and installing equipment, bringing the power back on. While the world around us was doing the important and necessary work of clearing away damage, we were already on the scene, rebuilding infrastructure. Making the first steps back toward normalcy.

All week, crews told about customers baking muffins and bringing bottled water. As we brought a block of lights on and loaded up trucks to head to the next site, people came out of their homes to clap, to say thank you.

Photo 1.3

In the areas that were hardest hit, while neighborhoods were clearing away the damage, EPB was there, already starting to rebuild.





Section 1.4

Two days after the storm, retiree Stanley Thurman's telephone rang. Teams in our Dispatch Center had been working more than a day and a night, and were calling the retired supervisor for backup. So Stanley, who uses a walker and a wheelchair, came in to the Dispatch Center – where he sat at the boards for the next twenty-six hours straight, dispatching jobs and assigning crews.

Two days later, the visiting crews ran into a problem – not in the field, but at their hotels. Because of a scheduling mix-up, many of them came back from a hard day of work to find their luggage in the hallway. Employees from Marketing and Strategic Research went into action, setting aside their regular duties to untangle the mess, keeping 800 rooms reserved to ensure that each person had a place to sleep.

People from all over the company found ways to support the field work. Our linemen became supervisors for out of town crews, directing restoration. Employees ran loads of laundry, delivered meals and kept thousands of Chattanooga residents updated through Twitter and Facebook. Retirees returned to work, traveling from as far away as Florida. Everyone played a part.

Photo 1.4

Employees, retirees and out of town crews pitched in to support our field teams – and the lives of people across our community.



9:48

SYSTEM 16

A Smarter Smart Grid





Section 2.1

Even when the weather is quiet, life at EPB is not. In the past year, we have made incredible strides in the biggest project in our history – launching America’s most progressive Smart Grid and one of the most powerful fiber optics communications systems in the world.

Think of the quality of life that electricity brings. It keeps us warm and safe, it helps us see. It powers our work and play, our schools and hospitals. But most people don’t think about it until something goes wrong; and when an outage happens, they don’t think about infrastructure or the complexities of power distribution. They think about when the lights will come back on.

This is how things should be. Because our community trusts us to understand why the power is off, and what we can do about it. They know that for EPB, outages aren’t numbers on a spreadsheet – we track outages in terms of people whose lives are impacted, and the minutes they are forced to spend without power. And we have an aggressive goal – to take the total outage minutes that our customers experience each year, and cut it by 40%.

When we set out to build a true Smart Grid – a sophisticated, efficient, self-healing electric power network – we knew what was possible. And even though we haven’t finished building it yet, this year we started to see that become a reality.

Photo 2.1

Our Smart Grid is changing the way we distribute and manage electric power – from SCADA, the command center for the grid, all of the way to homes and businesses. So we’re becoming even more efficient, reliable – and smarter – than ever before.





Section 2.2

During the storm, our Smart Grid demonstrated just how powerful it will be, once it is completed. From every part of the system where Smart Grid equipment has already been activated, we received a tremendous amount of information throughout the storm. This information, carried in real time on our fiber network, enabled us to avoid 250 situations where we would otherwise have sent a truck to investigate.

And because we designed our fiber network with significant redundancy and carefully engineered installation, we were also encouraged to learn just how durable it is. Historically, we communicated with substations via radio, but tornadoes took down three of the seven towers. Today we use fiber connections to twenty-seven substations throughout the area, forming the backbone of our Smart Grid. And we maintained contact with all but two of them throughout the storm.

But the most amazing results came from the Interruption switches, designed to route power around problems. During the storms Interruption switches isolated or restored more than 100 outages, rerouting power so thousands of people saw only a momentary flicker of their lights.

In all, the Smart Grid helped us avoid thousands of customer outage hours during the storms. Allowing us to concentrate on those who had been hardest hit, bringing everyone back online faster.



Photo 2.2

Smart equipment all along the grid brings value to Chattanooga. From smart meters that send key intelligence in real time, to automated switches that can reroute power around an outage.





Section 2.3

This year we completed the fiber network that is the backbone of our Smart Grid. The Golden Splice, the final connection in the network, took place at the far reaches of our 600 square mile service area. Connecting not only affluent areas or densely populated areas, but everyone to our fiber.

As of June 30, we had installed 64,000 Smart Meters and 465 Interruption switches. And even though we are not halfway to a completed Smart Grid, we are already seeing daily benefits.

During testing of activated equipment, we noted that 52 outage alerts happened on the same Smart Meter, always after 6:00 pm. Further analysis showed a recurring drop in voltage. So we investigated and found a large billboard whose lights had a broken connection. Remote data management enabled us to analyze the problem before visiting the site, and repair the issue before the customer even knew that there was a problem.

That's quality of life in action. By the end of 2012, our Smart Grid will be completely installed. Bringing greater benefits in mitigating the costs of energy generation, opening up opportunities for people to manage their own energy use, and much more. Just think of what's possible, what's coming.

Photo 2.3

With this splice, we completed the most powerful fiber optic network in America – and the only one in the world that touches every home and business in our service area. Bringing world-class services to everyone, no matter where they live.





Section 2.4

US Xpress is the third largest private truckload carrier in the United States. From its headquarters in Chattanooga, the company oversees 8,000 tractors and 22,000 trailers.

After experiencing an outage during the storms in February of 2011, they asked if we could help. We explained that we are installing automation across the distribution system, and the benefits that it will bring to electric power reliability – and that an Intellirupter switch was slated to be installed in their area within the coming weeks. The switch was installed and fully operational before the April storm hit.

During the tornadoes, US Xpress experienced four outages – but only lost power once, for a few minutes. According to our records, the Intellirupter serving their business isolated four incidents during the morning and evening storms and, each time, routed power around the problem so the company experienced almost no down time.

This helped not only US Xpress and the 1,200 other homes and businesses served by that Intellirupter switch, but our entire service area. Because with so many outages to respond to, we were able to use critical resources elsewhere, in places that otherwise might have been down for days.

Photo 2.4

We have already installed 465 Intellirupter smart switches throughout our area. When our Smart Grid is complete, we will have more of these self-healing, automated switches than any electric grid on earth.





Smart Move, to EPB Fiber Optics





Section 3.1

This year, we grew EPB Fiber Optics to a \$45.6 million business. We have more than 31,000 residential and business customers for our Fi TV, Fi-Speed Internet and Fi Phone.

Our fiber's ability to provide nearly unlimited bandwidth is gaining an international reputation – especially since we launched the fastest Internet in America. Lightning fast upload and download speeds, unmatched streaming and reliable service day or night. Meanwhile, the picture quality of Fi TV is winning converts, as is our full lineup of channels and Video on Demand programs, and a DVR that records four shows at once. And Fi Phone caps off the package, with crystal clear quality and connections that people can count on.

In fact, many of our customers so pleased that they are signing up for more services – every month, we process more than 500 requested upgrades.

Our strategy was to begin with localized, targeted marketing based on where services were available. But when we completed our fiber network in February, it was time to create EPB Fiber Optics' first-ever mass media advertising campaign.

Smart Move™ challenges the status quo, while applauding those who seek a better way – and choose EPB Fiber Optics as part of getting there. Kicking off at the end of the fiscal year, Smart Move began appearing on billboards, at expos, in magazines and newspapers, online and on television.

Photo 3.1

Like all great campaigns, Smart Move starts at home. With our employees – smart, capable people of diverse backgrounds, interests and talents, who help us deliver on our mission every day.







Section 3.2

As technology improves, people demand more of it – that it always become more user-friendly and relevant to how they live. So when we enhance our products, we do so in practical, relevant ways.

This year we doubled the speed of our Internet, for every customer, at no extra charge – even though we were already consistently faster than our competitors. Using our 100% fiber optic network, we made Chattanooga the first city in America to offer Internet speeds of 1 gigabit per second. And because our fiber network is available to every home and business in our service area, any customer can have access to the fastest Internet in the country.

We enhanced Fi TV, adding 28 channels and 8,200 Video on Demand programs – again, at no extra charge. We created our first Apps – quick view programs that give weather forecasts for any zip code, news feeds from sources like CNN and ESPN, and alerts about our own services.

It's not only locals who are noticing. Microsoft chose us as a beta site for their new Media Room 2.0, which powers the interactive features of Fi TV.

Photo 3.2

Thanks to our 100% fiber network, families all over our service area are enjoying the fastest, most powerful Internet and best video quality in the world – including many employee families, who are also customers.





Section 3.3

The real power of our fiber network is in how people use it. And our local business community is stepping up to the plate.

Major corporations, technology firms, mid-size companies and even freelance contractors are using our fiber to build and sustain their business. In addition to speed and bandwidth, many are taking advantage of innovations like Virtual Local Area Networks, which allow any business to network different locations together with incredible speed. And they are all benefitting from the knowledgeable, friendly local customer service that they expect when they call EPB.

Even retail stores, nonprofit organizations and other businesses are signing up. Rob Gentry runs his entire business on our fiber at his landmark restaurant, the Blue Plate and new bar, Local 191 – running credit cards, updating his website, ordering inventory and showing tonight's big game.

Our fiber is also attracting progressive companies to Chattanooga, importing talented individuals drawn to the reliability of our Smart Grid and the speed of our Internet. A Gig of speed brings so much power, so much potential – that entrepreneurs are eager to explore what is possible.

Photo 3.3

Businesses from technology firms to restaurants are powering their operational systems and customer experience on our 100% fiber network.





Section 3.4

We want the best for our children – the best opportunities, the best education, the ability to learn smarter. So we are working with the Hamilton County Department of Education and Education Networks of America, Inc. to bring high speed Internet to every grade and middle school in our public system.

Battle Academy is a magnet elementary school located one half mile from our downtown headquarters. Before EPB fiber, the school was regularly running out of bandwidth, meaning that critical issues in the administrative offices and the classroom were not being addressed.

Our Network Operations team changed that when they brought a 100 megabits per second connection to Battle. Today, administrative files, emails and records are easier to manage, and the school is linked to the Department of Education offices by an ultra-high speed connection.

Even more importantly, the network has opened doors for students. No matter whether a student comes from an affluent or a disadvantaged background, whether they are in gifted or at risk programs, they are all experiencing new kinds of interactive learning. Watching live events like a NASA shuttle launch, video conferencing with authors from across the country, conducting virtual science experiments and connecting with other schoolchildren worldwide.

Creating new opportunities in the classroom, and advantages for the rest of their lives.

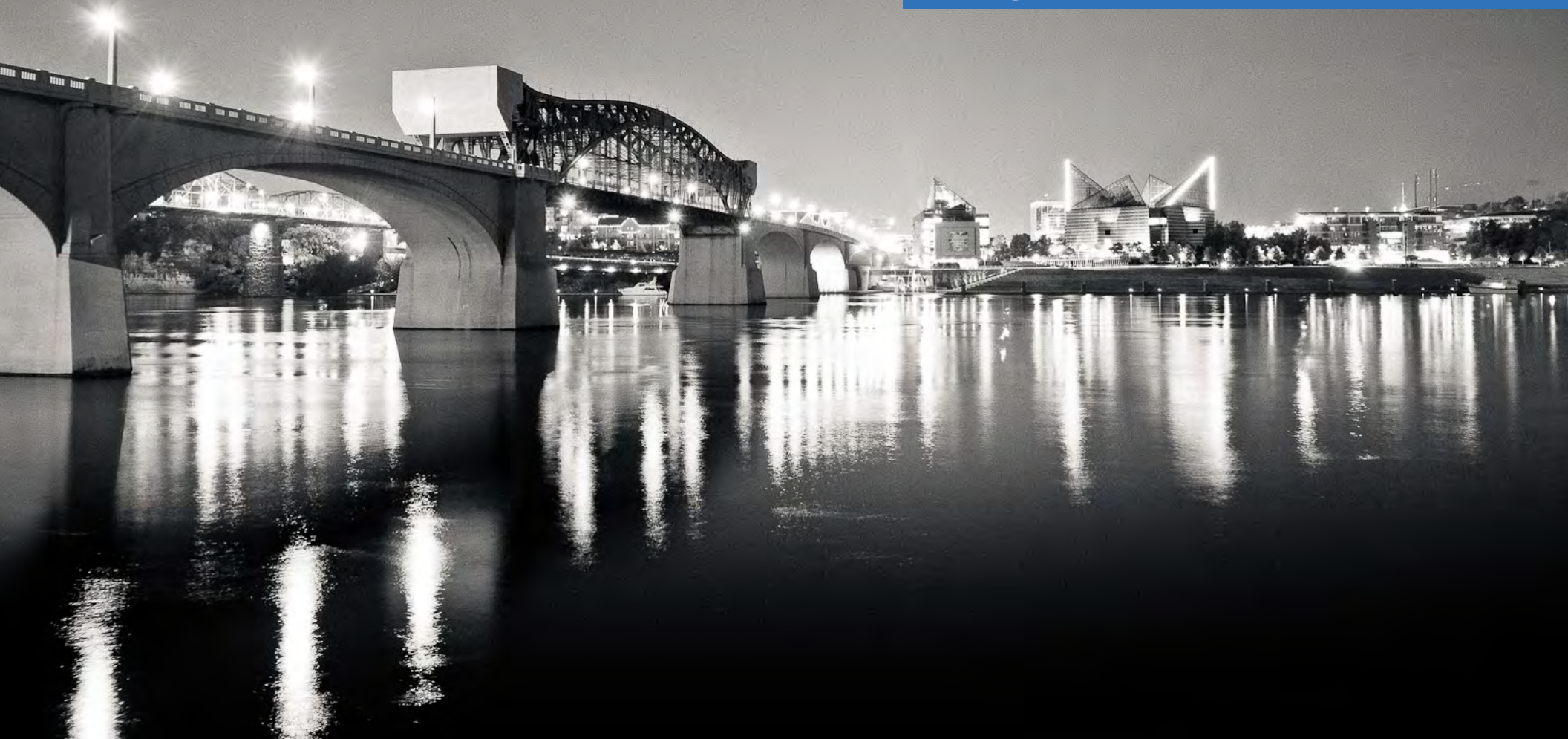


Photo 3.4

We're engineering a better future for our children – including working with local schools to bring new learning tools, interactive classrooms, and better opportunities to students.



A great place to live;
a great place to work





Section 4.1

We are an engineering company. We understand wires and switches, networks and head-ends; we know how to make systems efficient, and how to bring innovation that capitalizes on the best of the old, while embracing the new.

But we are also a community company. Owned by the people of our community, EPB has a focused mission – we exist to enhance local quality of life by providing energy and communications services with reliability, efficiency and courtesy.

Like the storm restoration in April, our fiber network is a great symbol for what we do, and why we do it. Our Smart Grid and EPB Fiber Optics services are much like the introduction of electric power in the 1930s. At that time, most people saw electricity only as an alternative to an oil lamp – for producing light. But it did not take long for people to realize that electricity could power much more than a lightbulb.

Our fiber network, like our electric grid, touches every corner of our service area. Urban and rural alike – every home and business, center of learning or healing, entertainment and transportation hub. By bringing next generation connectivity and the reliability of the world's only true Smart Grid, we're helping make Chattanooga a new frontier of opportunity.

Photo 4.1

We are a community company, owned by the people of Chattanooga. So we have a singular mission – to enhance quality of life in our community.





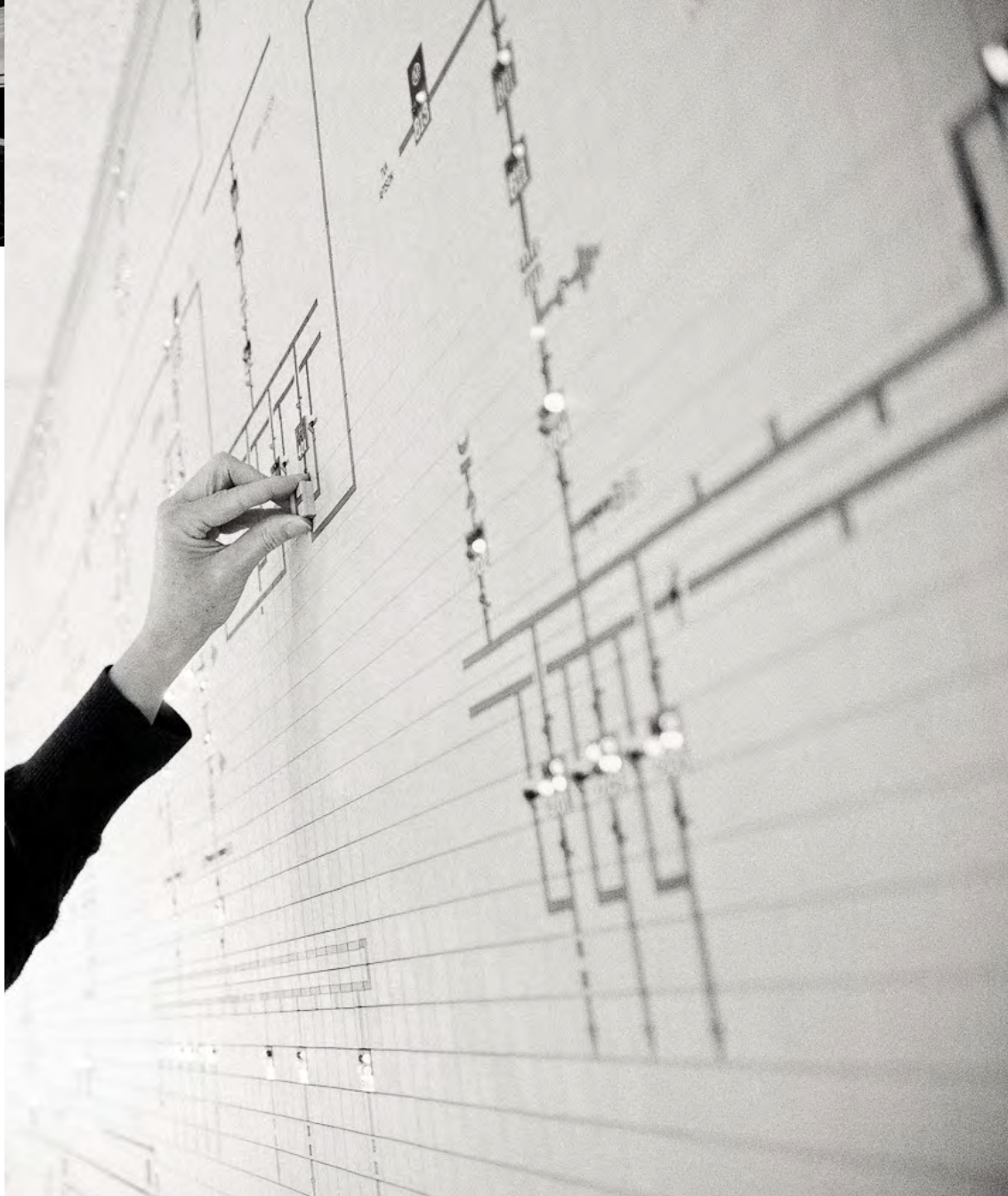
Section 4.2

Jobs. They are on everyone's mind right now – and the improvements that we have made in the past year are directly related to job creation here at home.

In recent years, we have worked alongside many other Chattanoogaans to help recruit major employers like Alstom and Volkswagen. This year, Chattanooga added Amazon.com to the list. The world's largest online retailer – an icon of Internet business – is building massive distribution centers in Chattanooga and Cleveland, Tennessee, hiring more than 1,400 permanent positions and an additional 2,000 seasonal employees.

And according to the Chattanooga Chamber of Commerce, other companies credit our fiber network as playing a major part in their choice to start or relocate in the area – bringing an additional 2,441 jobs.

Our infrastructure is an amazing tool for economic development, and for recruiting companies to Chattanooga. And as they build businesses, the dollars and jobs they generate benefit everyone.



Business Day

The New York Times

More Broadband in More Places, and Maybe Lifting

Coming to Chattanooga: The Fastest Net Service, And Price Experiments

By STEVE LOHR

In the global race to see who can offer the fastest Internet service, an unlikely challenger has emerged: Chattanooga, Tenn.

The city-owned utility, EPB, plans to announce on Monday that by the end of this year it will offer ultra-high-speed Internet service of up to one gigabit per second. That is 200 times faster than the average broadband service.

Only Hong Kong and Seoul in the world offer faster service.

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Section 4.3

What is it about our fiber network that has captured the attention of cities around the country? Is it our attention to big-picture strategy, as well as small details? Is it the potential of our infrastructure to shape how Chattanooga lives, works and plays?

When we set out to build the Smart Grid, we knew that we would change not only how electricity is distributed here, but how all electric utilities do their jobs. When we launched the Gig, we knew that Chattanooga would have everyone's attention.

The New York Times put us on the front page of their business section. Millions of Twitter posts linked to news stories about Chattanooga economic development. We were invited to Washington, D.C. to share about our Smart Grid on Capitol Hill.

We tell our Smart Grid story to utilities across America, at Fiber to the Home conventions and Smart Grid Roadshows, in public and private meetings. In each place we discuss our belief that engineered technology can offer more than a way to read meters remotely or compete with other video and Internet providers – that it is possible to help our industry, our customers and our community engineer the future.

We share our struggles and our successes, because we believe that the good we do at home can become good for communities everywhere.

Photo 4.3

Our fiber network and launch of America's fastest Internet made headlines around the world.







Section 4.4

In the past several years, we have all felt the pinch of the financial downturn. But some feel it more than others – throughout our service area, right now, there are still many people in need.

Our United Way campaign set a new record for giving this year. Employees contributed \$187,000 to fund programs that benefit education, help vulnerable families achieve stability, and assist those who struggle due to disabilities or abuse to find sure footing for the future. And since the past two summers were two of the hottest Tennessee has ever seen, we also teamed up with Ace Hardware to provide 200 fans to families in danger from the extreme heat.

A happy holiday at EPB included buying gifts for 95 children and seniors in need through the Salvation Army Angel Trees, and delivering holiday food baskets to 65 local families. And no holiday would be complete without unveiling our annual Holiday Windows, the one-of-a-kind tradition that kicks off seasonal festivities downtown.

Our employees give back in many ways – volunteering time, fundraising, participating in events like teaching safety in schools and community centers throughout our service area, and much more. We're a different kind of utility company, and it shows.

Photo 4.4

We are active in the community – teaming up with local nonprofits to help neighbors in need, volunteering our time, energy and talents to make Chattanooga a better place to live.



Visit epb.net

to view EPB's 2011 financials

