



# The Michigan Solution to Statewide Broadband Infrastructure

## Should Arizona Enact Laws to Initiate Statewide Broadband Infrastructure?

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### Introduction

*In October, 2002, GITA staff began an analysis of states that had legislated laws and initiated government sponsored programs to assist in developing broadband telecommunication infrastructure and services to meet the needs of rural and underserved areas. The objective of the study was to obtain comprehensive information about these laws and the effect they have on these states as they solved their digital divide issues and problems. The laws studied included broadband development authorities, infrastructure funding, tax incentives, and Rights-of-Way permitting. While in the research and drafting of documents for that analysis, it became apparent that the State of Michigan had the most progressive, intuitive, sustainable, and far reaching programs to achieve the results they needed. The Michigan circumstances and requirements for statewide broadband services closely parallel the State of Arizona. The programs created and acted upon in Michigan are worthy of consideration and scrutiny.*

*To explore further, GITA staff interviewed Michigan government sponsors leading, controlling, and managing these programs. It was then decided that this study should concentrate exclusively on the Michigan legislative package of broadband laws and programs, which are collectively referred to as the Michigan Broadband Legislation. This is the result of that effort.*

January 21, 2003

## **Analysis of the State of Michigan Newly Enacted Broadband Laws**

*ACT 48, SB 880: Metropolitan Telecommunications Rights-of-Way Oversight ACT*

*ACT 49, SB 881: Michigan Broadband Development Authority ACT*

*ACT 50, SB 999: Tax Credit ACT*

### **Purpose of this Analysis:**

The State of Michigan has recently enacted laws that have proven to have significant impact and assistance in the development of telecommunication broadband infrastructure and services throughout the State, particularly in the underserved rural areas. GITA staff has determined that the Michigan program approach, along with new legislation to solve their digital divide problems, has significant merit as a model for Arizona. Michigan's broadband legislation was years in preparation, development, and refining before its enactment. It is considered far-reaching, innovative, and an example for other states facing similar challenges. GITA staff considers the Michigan program to be a promising platform from which Arizona can learn as it also bridges the digital divide in telecommunications infrastructure and services in rural and underserved areas of the State.

### **Executive Summary:**

The Federal Telecommunication Act of 1996<sup>1</sup>, with the purpose of deregulating the industry and benefiting consumers, has had global impact on all aspects of life and business throughout the United States. Not all areas of the country have reaped the full advantages of this revolutionary legislation. Just as in other states, Arizona has rural and underserved areas with digital divide issues that may not be solved through traditional market driven means or federal legislation. State laws, local ordinances, and customary practices may not provide all the incentives required to bridge this divide in rural areas and in some cases may even become a disincentive to broadband deployment by local providers.

Many states have legislated actions to assist, refine, streamline, address major issues, and correct outdated laws from the pre-deregulation period. They want to ensure that their states have universal evenly distributed broadband infrastructure. Michigan is one of those states that not only enacted laws, that our research indicates encompassed some of the best concepts of other states, but reached out to ensure that the new laws would positively impact the State in broadband development for years to come.

Even though Michigan spent years in developing and refining these broadband laws, they are relatively simple in design, logical, straight-forward, stakeholder friendly, and

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<sup>1</sup> [TCA 1996](#)

supported by State and local government, the telecommunication developers, and the financial community. These laws have minimal fiscal impact on State finances through a unique combination of loans, fees, tax credits, and rural broadband development incentives.

## **History:**

Michigan, with a population of 10 Million (8th in U.S. population size), and 164 persons per square mile, has resolved that broadband telecommunications availability to all residents and businesses across the State is a serious economic necessity, and no longer considered a casual luxury. Two years ago, Michigan Governor John Engler reported nationally that the State was having difficulty attracting new businesses with high speed communication requirements because the broadband infrastructure and access points to that infrastructure were not available in many parts of the State. He further noted that the State's reviving auto industry was imposing new high-speed communication requirements on all its suppliers, further exacerbating the broadband issues in the State. Government and policymakers resolved that unless broadband was made available to all parts of the State, Michigan stood to lose its prominence.<sup>2</sup> They determined, through careful research and planning, that "... access to high-speed telecommunication services is the most important State infrastructure issue for the new century."<sup>3</sup>

In comparison, Arizona, with a population of over 5 Million (20th largest State), and a population density of 45 persons per square mile, has the same requirement for broadband development to maintain its economic vitality. Arizona officials have also determined that affordable, high quality, high-speed telecommunications services are essential for the State and must be made readily available to all.<sup>4</sup>

## **Michigan Broadband Stated Issues:**

Researchers and economic advisors to Michigan policymakers have resolutely maintained that basic broadband issues must be identified if quantitative progress can be measured with new laws:

1. There is a lack of available bandwidth and advanced telecommunications services throughout the State. The need for broadband backbone highways, which provide

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<sup>2</sup> LinkMichigan Report: Launched in May 2001, the LinkMichigan effort is working to transform Michigan's telecommunications infrastructure into one of the most robust and advanced in the nation. The four-step approach includes aggregating statewide telecommunication purchases to create a high-speed backbone, implementing taxing and permitting fairness, increasing access to information about the telecommunication infrastructure that exists in Michigan, and providing funds for regional telecommunication planning of last mile solutions. See more at: [Link Michigan Report](#)

<sup>3</sup> LinkMichigan Report

<sup>4</sup> (ATIC) Arizona Telecommunications and Information Council founded under the (GSPED) Governors Strategic Partnership for Economic Development: The ATIC mission is to promote and support the adoption of effective public policies for the State of Arizona and local communities that encourage investment and deployment of information technologies and telecommunication services. The ATIC's public and private partners include large and small businesses, economic development organizations, libraries, consumer organizations, local and State government agencies, educational institutions, health care, the Arizona Corporation Commission, the Arizona Legislature, and information technology and telecommunications companies. See more at: [ATIC](#)

the infrastructure support for high speed robust local services, is necessary throughout the State. The present backbone is inconsistent, proprietary in design, and does not lend itself well to offer opportunities for competition.

2. Where bandwidth is available, affordable pricing and quality service are lacking and are major concerns.
3. Information on broadband infrastructure and telecommunication services offered throughout the State by community or otherwise is minimal or non-existent. Specific site location of infrastructure, access points, services offerings, competition, and plans for installation are also lacking.

The legislators also established requirements as the new laws were developing:

4. There is a growing public frustration concerning the lack of competitive telecommunication services, inadequate infrastructure, and unacceptable delays in deploying broadband throughout the State. These issues have already adversely affected economic development and will continue to do so without government intervention.
5. Michigan needs to have a dramatic increase in levels of access to advanced telecommunication services to support the needs of K-12, universities, colleges, medical institutions, and e-Government.
6. There needs to be a level regulatory playing field available to all telecommunication and information carriers so they can plan and deploy infrastructure and service.
7. There is a need to enact one-stop Rights-of-Way permitting process and to create common Rights-of-Way rules for all carriers to use in their construction.
8. The State must establish one common telecommunication fee system to replace contradictory and differing programs in place around the State.
9. All these issues and requirements must be solved without use of regulatory interferences, new taxes, or any fiscal impact to the State.

### **Legislative Action Taken by Michigan to Solve These Stated Issues:**

Following years of attempts to secure the necessary legislative support for these laws, the sponsors, through painstaking and meticulous research, compromise, and modification of language, succeeded in unanimously passage by both the Senate and the House during the

2002 Regular Session. The Bills were signed into law on March 14<sup>5</sup>. These Broadband Bill summaries are:

**ACT 48, SB 880:** *Creation of a Rights-of-Way Oversight Authority to ensure reasonable control and management of public Rights-of-Way, to provide for fees, to proscribe the powers and duties of municipalities and certain agencies and officials, to provide for penalties, and to repeal acts and part of acts.*

**ACT 49, SB 881:** *Creation of the Michigan Broadband Development Authority to provide non-traditional long term financing for telecommunications infrastructure, create funds and accounts, issue bonds and notes, enter into joint-venture contracts, and to provide incentives for development of broadband services.*

**ACT 50, SB 999:** *Tax Credit for telecommunications infrastructure deployment. This bill establishes property tax credits to offset the annual Rights-of-Way fees broadband providers pay to local governments.*

## **Resolution of Stated Issues by Michigan Legislation Enacting the Broadband Laws:**

These three laws, known as the Michigan Broadband Laws, were enacted to solve the stated issues brought to legislation by the sponsors of the bills. Each law was tie-barred to the other, to keep the uniformity and global intentions intact.

Supporters of the new legislation maintain that the Rights-of-Way Oversight Authority (ACT 48) will assist in eliminating a formidable barrier to broadband infrastructure deployment in all metropolitan communities. In complaints, supported by official studies, and issued by the telecommunication services providers that build backbone infrastructure within the State, the required fees and processes of obtaining Rights-of-Way within metropolitan communities was unevenly negotiated, unfair, disjointed, and a disincentive to provide new services.<sup>6</sup> They also complained of often 8 - 12 months timeframe lapses between application and granting the required permits to construct. Michigan's governor, John Engler, even labeled these local public servants as "broadband bandits" in his annual State of the State Message, adding fuel to an already burning issue.

ACT 48 is created to provide a statewide administrative, access, and maintenance fee program to charge for Rights-of-Way within metropolitan areas. The fee revenues are redistributed throughout the State to local units, cities, and villages in a comprehensive allocation formula. The ACT handily provides provisions for waivers to non-telecommunication utilities and governmental agencies. It also provides variances to initiate broadband development and services in rural and underserved areas.

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<sup>5</sup> Tie-barred Senate Bills [880 \(Act 48\)](#), [999 \(Act 50\)](#), and [881 \(Act 49\)](#)

<sup>6</sup> [LinkMichigan](#) - Taxing and Permitting Fairness

The Rights-of-Way Oversight Authority is required to deliver a plan for ubiquitous Rights-of-Way permitting throughout the State. The plan makes the Authority responsible for coordinating the Rights-of-Way permitting for the telecommunication providers among the local municipalities, cities, counties, and the State and local highway departments.

Those service providers requesting permits for Rights-of-Way are required to submit plans, deployment routes, and maps, along with information on the telecommunications services offered and planned. This information will be available to stakeholders for planning purposes and solves a basic broadband issue that this law was enacted to address.

From our research, the government and industry supporters of this ACT 48, including the telecommunications providers, believe that this statewide procedure will enable an even-handed, level, and non-discriminatory platform for new high speed bandwidth services. Government supporters also indicate that it will initiate reasonable prices, and raise the bar on availability and quality broadband services to all areas of the State. The industry and service providers applaud the ACT for its attempt to standardization Rights-of-Way fees and permits, and the possibilities it offers for them to plan future construction activities without delays and unanticipated budget overruns.

ACT 50, providing tax credits, will virtually allow an offset of all access and maintenance fees paid for the use of Rights-of-Way under ACT 48. This tax credit can also include other eligible expenditures, such as construction costs, materials, and equipment. This ACT has the distinct objective of targeting underserved areas of Michigan, where the waivers and variances made by the Rights-of-Way Oversight Authority can impact new deployments of infrastructure and services (See Sec. 2 of ACT 49 below<sup>1</sup>).

ACT 49, The Michigan Broadband Development Authority (MBDA), was created as a tool to fill in a financing void that traditional institutions do not satisfy. This new Authority will be the anchor for the rural telecommunications providers that have asked for long term financing from the traditional finance institutions, and been denied. Since the business case for rural areas are often limited or non-existent, these low demand - low population rural communities will now have a government agency specifically equipped financially and politically to work with them and their local telecom providers. As the law reads, the Broadband Authority will have the ability to enter into long term contracts and partnerships to ensure that the telecommunication needs of the communities are met.

## **Lessons Learned from Michigan Legislation Enacting the Broadband Laws:**

The Michigan Broadband Laws were enacted in March of 2002<sup>7</sup>. From our recent interviews with the MBDA, now fully organized and functioning, we were told that about 40 applications have been received, representing \$300M in requests for loans. Once the speculative loan applications are fettered out and serious requests evaluated, MBDA believes that more than \$10M will be eligible for finance. At this point, MBDA, along with its underwriter, will issue a public tax-exempt bond to provide the funding for the loans.

MBDA has also shown support for the purveyors of leading edge technologies that are outside the traditional mainstream of broadband infrastructure solutions. These provisioning techniques, which are primarily wireless based, have proven to be robust, easily deployed, verifiable in other states, and sustainable. Low interest rate loans, with longer loan periods, for these untraditional technological deployments are seen as positive inducements toward broadband connectivity in some underserved, broadband deprived areas. Since the risks are greater in new companies with new technologies, MBDA is using stricter guidelines and terms in the loan requirements. They anticipate a need to have direct participation in the new provider's operations, revenue sharing, board of director representation, and other tactics to ensure the success of the companies.

MBDA found that the larger, more stable, Local Exchange Carriers, such as SBC and Verizon, are able to secure similar loan terms through their own traditional financial institutions. The smaller providers, however, like the Independent Local Exchange Carriers, Internet Service Providers, and other infrastructure and service carriers, do not have this ability to borrow favorably. Short-term, high interest rate loans are injuring their expansion plans. This is even more apparent in the wireless and antenna based technological provisioning, where the longest traditional financing available was 3 to 5 years.

MBDA, therefore, believes that the new laws will have the greatest impact on the smaller service providers. Since the small providers are serving the rural communities, the intents of the new legislation to initiate broadband in these communities will be met. When the tax incentive law is added to the loan and financial packages offered by MBDA, a positive impact is highly likely for rural communities.

The cable companies of Michigan are also applying for loans with MBDA. The cable companies that are attempting rural deployments and upgrades to new broadband services are having a difficult time convincing their regular lending institutions that they are sustainable providers of competitive voice and data technologies to their traditional video customers. The cable industry, already known as traditionally less stable than the local telephone company, has the same sensitive business case planning and pro-forma requirements as its competition to secure capital financing. In Arizona, where rural

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<sup>7</sup> Act 49 - 3-02, Act 50 - 3-02, and Act 48 - 11-02.

population counts are 3 - 4 times lower still, traditional financing will be even more problematic for cable companies as they attempt to build and prove their business cases.

Since the passage of the broadband legislation, MBDA has become active in uncovering unique solutions to meet digital divide problem. These solutions include "push-pull strategies" such as encouraging loan applications from the companies that use ("users") high-speed broadband network facilities. These companies are buying, building, and deploying massive statewide networks, requiring extraordinarily large telecommunication transmission pipes. Industry specific, and willing to contract with the local service providers for extended periods, these companies have difficulty in getting long term, 20 year plus, financing for technological capital asset expenditures. These situations provide a unique opportunity for MBDA to finance the "user" as they build their private networks. These users, in turn, contract with the local telecom provider for high speed services. The provider must now deploy new broadband backbones, last mile connectivity solutions, and other robust services to fill the new contracts and agreements. In this scenario, the user acts as a sustainable anchor tenant, financed by MBDA, indirectly initiating rural telecommunications infrastructure and services. MBDA has explained that they also plan to finance local area networks and inside plant projects, if doing so will assist in the objectives and goals of the new broadband laws.

Tax credits and incentives, along with exemptions for rural Rights-of-Way fees can be used by both the user and the service provider, adding more incentive to build new infrastructure. MBDA indicated that without these inducements, these user companies may plan minimal expansions or even relocate to other areas of the State where broadband services are more readily available, depriving the local community of the economic development opportunity.

Success: On December 18, 2002, MBDA issued a press release announcing financial support for a new fiber optic telecommunications network between the lower and upper peninsulas extending across the Mackinac Bridge. This project initiates new secure redundant fiber backbones, saving millions of dollars in State telecommunication costs, and provides a mechanism for service providers to upgrade infrastructure, as the growth in networks continues in underserved areas of the State. Governor Engler stated in an interview for this public announcement that "No other project could better exemplify my hope and vision for the type of initiative I wanted to spur with the creation of this new agency."<sup>8</sup>

"It is an appropriate symbol for our new agency to have this important project as its first major initiative," noted William Rosenberg, Chairman, and President of the Broadband Authority. "Access to high-speed Internet highways is vital for all regions of the state. This new link will fill a major gap in the state's network infrastructure and represents a unique public/private partnership that we hope to replicate in other parts of Michigan."<sup>9</sup>

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<sup>8</sup> [MBDA Bridging Michigan's Peninsulas](#)

<sup>9</sup> [MBDA](#)

In interviews with MBDA, GITA staff learned that this project would not have been possible without financial support from the Broadband Authority. The MBDA, armed with the tools engendered to them by legislation, is confident and eager to face all digital divide challenges to ensure that Michigan is secure in knowing that their broadband connections are the best in the country.

## **Comprehensive Analysis of the Michigan Broadband Laws<sup>10</sup>:**

**ACT 48, SB 880:** *Creation of a Rights-of-Way Oversight Authority to ensure reasonable control and management of public Rights-of-Way, to provide for fees, to proscribe the powers and duties of municipalities and certain agencies and officials, to provide for penalties, and to repeal acts and part of acts.*<sup>11</sup>

This ACT 48 will:

- allow the Authority to standardize the Rights-of-Way permitting statewide
- give the Authority the exclusive power to access fees on telecommunication infrastructure in metropolitan area Rights-of-Way and distribute the fees to the municipalities (township, city, or village) in an even-handed process.

The Provider must: Apply for a permit from the municipality and pay a one-time \$500 administrative permit fee. Pay to Authority an annual maintenance and access fee per linear foot. Submit route maps and infrastructure designs for community and State planning.

The Municipality must: Grant a permit, based on accommodation merits in a timely manner. Use the fees for Rights-of-Way purposes only, not for telecommunication facilities to serve residential or commercial customers.

- allow the Authority to provide for an annual maintenance and access fee paid to the Authority per linear foot, offset by tax credits.

2 ¢ per year per linear foot of Right-of-Way used during the first year

5 ¢ per foot thereafter

1 ¢ per year per linear foot of Right-of-Way for a cable provider that is offering telecommunication services, offset by broadband investment.

- enable the Authority to ensure that fees are redistributed to the local units using a weighted linear foot distribution formula<sup>12</sup> (25%), and cities/villages (75%).

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<sup>10</sup> Floor Analysis, Enrolled Summary, and Enrolled Senate Bills [880 \(Act 48\)](#), [999 \(Act 50\)](#), and [881 \(Act 49\)](#)

<sup>11</sup> [Summary Metro Act \(Public Act 48 of 2002\) Summary, by Attorneys for Michigan Townships Association](#)

<sup>12</sup> Townships within a municipality

Municipalities are required to comply with the bill to receive their fee share. They also must eliminate other local established access fees for Rights-of-Way.

- allow providers to offset the fee against their utility property tax (See ACT 50).
- allow providers to co-locate facility with other providers in the Rights-of-Way and share fees.
- allow Authority to waiver the fees of providers in underserved areas of the State, to initiated new broadband construction. The Authority exempts governments, quasi-governments, education institutions, utilities, and public works from the fees.
- maintain minimal fiscal impact to the State of Michigan:

ACT'S 48 & 50 are design to increase revenues and expenses by the same amount.

Approximately \$30M in maintenance and access fees will be paid to the Authority by telecommunication service providers. These fees will be redistributed and shared with local units, townships, cities, and villages.

Cable operators must continue or obtain cable franchises

**ACT 50, SB 999:** *Tax Credit for telecommunications infrastructure deployment.*

This ACT 50 will:

- allow providers to claim two categories of tax credits against their utility property tax<sup>13</sup> up to 6 % of eligible expenditures.

Credit one is investments in property, including broadband infrastructure

Credit two is the maintenance and access fees paid under ACT 48.

- maintain minimal fiscal impact to the State of Michigan:

In aggregate, the combined effect of both laws (ACT 48 & 50) will be to reduce the State General Fund revenues by approximately \$10M in 2002-03, and \$27M in 2003-04, while initiating approximately \$400M in new broadband infrastructure that would not otherwise be built.

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<sup>13</sup> [Public Act 282, Assessment and Taxation of the property of Utilities](#)

**ACT 49, SB 881:** *Creation of the Michigan Broadband Development Authority to provide non-traditional long term financing for telecommunications infrastructure, create funds and accounts, issue bonds and notes, enter into joint-venture contracts, and to provide incentives for development of broadband services.*

This ACT 49 will:

- give the Authority the power to issue tax-exempt bonds and notes to finance broadband telecommunications infrastructure.
- create a reserve capital account with the purpose of securing notes and bonds.
- allow the Authority to enter into joint-ventures and partnership arrangements, but remain independent and non-competitive with the private sector.
- allow the Authority to research and recommend legislative activities to meet the needs of broadband infrastructure throughout the State.
- ensure that the Authority maintains minimal fiscal impact to the State of Michigan:

The ACT does not provide funding for the administration and operation of the Broadband Authority. The Authority must maintain limited risk or obligations to the State

**Legislation Actions Taken by Other States to Solve Their Broadband Issues<sup>14</sup>:** *Idaho, Kansas, Maine, and Nebraska passed broadband legislation in 2001-02. In prior years New York, Virginia, Montana, North Carolina, and Tennessee also enacted creative laws for the same purpose. California, Pennsylvania, Illinois, Texas, and Georgia have legislated funding programs to ensure broadband infrastructure and services for rural communities.*

New York enacted the Telecommunication and Internet Access Development Authority. The law grants the power to the authority to issue bonds and notes, loan, partner, and provide grants for Internet and broadband access throughout the State.

Virginia created the Office of the Broadband Deployment with responsibilities to coordinate all public and quasi-public efforts to deploy broadband telecommunications and to seek public, quasi-public, and private funding to carry out its mission.

Montana passed laws to allow tax credits for telecommunications infrastructure. Eight Independent Telephone Companies account for \$14 million in new infrastructure construction.

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<sup>14</sup> [National Conference of State Legislatures](#)

North Carolina created, by law, the Rural Internet Access Authority. This self-funding organization is credited for initiating millions of dollars in broadband development throughout the State.

Tennessee created the Rural Internet Access Authority to ensure broadband deployment in the State.

The Idaho legislation passed a tax credit for construction of telecommunications, which has garnered over \$40M in broadband construction activity.

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**<sup>i</sup> Reference: Senate Bill 881, Act 49, Sec. 1 & 2:**

Sec. 1. This act shall be known and may be cited as the "Michigan broadband development authority act".

Sec. 2. The legislature finds that certain areas of this State are not being adequately served with broadband services and that, for the benefit of the people of this State and the improvement of their health, welfare, and living conditions, the improvement of the economic and educational welfare of this State, and the improvement of its public safety and security, it is essential that broadband infrastructure be expanded to provide broadband services throughout this State and that the private sector should be encouraged to invest in the deployment of broadband services and networks and that financing by this authority will encourage broadband investment. This act shall provide a method to assure that economic, technological, and logistical integrated broadband services are provided throughout this State on a nondiscriminatory basis. The provision of affordable broadband services and networks will assure the long-term growth of and the enhancement and delivery of services by the educational, medical, commercial, and governmental entities within this State, including, but not limited to, municipalities and counties, public safety facilities, judicial and criminal facilities, telemedical facilities, schools, colleges, universities, hospitals, libraries, community centers, businesses, nonprofit organizations, and residential properties. To increase the speed and availability at which affordable broadband services become available in this State, it is declared to be a valid public purpose to assist in the financing and refinancing of the private and public sectors' development of a statewide broadband infrastructure. It is further declared to be a valid public purpose for the authority created under this act to issue bonds and notes to provide for financing or refinancing to broadband developers and broadband operators, to make loans and provide joint venture and partnership arrangements subject to section 7(2) and (3) to broadband developers and broadband operators, to enter into contracts for the lease or management of all or portions of the broadband infrastructure, and to enter into joint venture and partnership arrangements and partnerships with persons that will acquire, construct, develop, create, maintain, own, and operate all or portions of the broadband infrastructure. The legislature finds that the authority created and powers conferred by this act constitute a necessary program and serve a necessary public purpose.

Sec. 3 - 25 .....