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BILL ANALYSIS

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Senate Bill 637 (Substitute S-2 as passed by the Senate)
Senate Bill 894 (Substitute S-1 as passed by the Senate)
Sponsor: Senator Joe Hune (S.B. 637)
Senator Mike Nofs (S.B. 894)
Committee: Energy and Technology

Date Completed: 5-3-18

RATIONALE

First introduced in the 1990s, "smartphones" have evolved quickly in a relatively short period of time. Mobile phones that perform many of the functions of a computer, smartphones were rarely found in the U.S. until the development of the BlackBerry in the mid-2000s, and they continued to gain mainstream popularity with the introduction of the iPhone in 2007. Since then, smartphones ownership has grown exponentially. Today, 77% of adults in the U.S. say they own a smartphone, up from 35% in 2011, according to the Pew Research Center. However, as smartphones and other wireless digital devices become more advanced and more numerous, the wireless networks that connect them must keep pace. Deploying the appropriate mobile broadband infrastructure is considered critical to sustaining the rapid growth of wireless technology and expanding wireless broadband coverage, while maintaining the speed and reliability that wireless users desire. Many people believe that small cell wireless technology is one solution to improving mobile service and coverage.

Small cells are low-powered cellular radio access nodes that operate as base stations, receiving and sending signals. Small cells typically support a single carrier, operate on one or two frequency bands, and require minimal power to operate. However, small cells have a range of only 10 meters to a few kilometers, less than two miles, and transmit less power than a remote radio unit or digital antenna system. This means that a large number of small cells must be deployed in order for them to be effective. It is believed that creating a dense network of small cells that are placed on existing infrastructure ultimately will eliminate the need for further cell tower construction. Evidently, the use of small cell wireless technology also is important for the deployment of advanced, or "fifth generation", wireless systems, called 5G networks, as well as for the development and implementation of autonomous vehicles and the development of "smart cities" (urban areas that use different types of electronic data collection sensors for various purposes, such as managing traffic lights or monitoring water systems).

Many people believe that utilizing small cell technology in Michigan would provide wireless consumers with faster and more reliable connections, bring economic growth and development to local communities, and make Michigan's wireless infrastructure a competitive frontrunner among other states. To accomplish this, it has been suggested that State create a regulatory framework for small cell deployment that would establish a uniform permitting process for wireless providers seeking access to pole structures in rights-of-way, improve mobile networks in congested urban areas, and expand high-speed broadband service in rural areas.

CONTENT

Senate Bill 637 (S-2) would enact the "Small Wireless Communications Facilities Deployment Act" to do the following:

-- **Prohibit an authority (the State or a local unit) from prohibiting, regulating, or charging for the collocation of small cell wireless facilities, except as provided in the Act.**
-- **Prohibit an authority from entering into an exclusive agreement for use of a right-of-way (ROW) for work on utility poles or the collocation of small cell wireless facilities.**
-- **Prohibit an authority from charging a wireless provider a rate or fee for the use of an ROW, except as provided in the Act.**
-- **Permit a wireless provider to colocate small wireless facilities and work on utility poles in, along, across, upon, and under an ROW, subject to certain height limitations.**
-- **Permit an authority to adopt requirements for design or concealments measures in a historic district, downtown district, or residential district, subject to evaluation on the effects on historic properties.**
-- **Allow an authority to require a wireless provider to repair any damage to an ROW directly caused by the provider's activities while working on small cell wireless facilities or utility poles in the ROW.**
-- **Allow an authority to require a permit to colocate a small cell wireless facility or install, modify, or replace a utility pole on which a small cell wireless facility would be colocated.**
-- **Require an application and an application fee for a permit to meet certain conditions.**
-- **Require a provider to complete collocation within one year after a permit was granted, subject to exceptions.**
-- **Require a wireless provider to notify an authority in writing before discontinuing its use of a small cell wireless facility, utility pole, or wireless support structure, and specify when and how the facility would be removed.**
-- **Specify requirements an application for a zoning approval would have to meet.**
-- **Require an authority to approve or deny an application and notify the applicant within 90 days if the application were for a modification for a wireless support structure or the installation of a new small cell wireless facility, or within 150 days if the application were for a new wireless support structure.**
-- **Prohibit an authority from denying an application without a reasonable basis for the denial, require a denial to be supported by substantial evidence, and prohibit a denial from discriminating with respect to the placement of facilities or other wireless providers.**
-- **Establish application fees for zoning approval, and require a wireless provider to commence construction of an approved structure or facility within one year after zoning approval was granted.**
-- **Prohibit an authority from entering into an exclusive arrangement with any person for the right to attach to authority poles.**
-- **Establish requirements that a rate or fee to colocate a small cell wireless facility on an authority pole would have to meet.**
-- **Prohibit the governing body of a municipally owned electric utility from entering into an exclusive agreement with any person for the right to attach to nonauthority poles.**
-- **Require the governing body of a municipally owned electric utility to adopt a process for wireless providers' requests to colocate small cell wireless facilities, and establish requirements that a rate or fee to process such requests would have to meet.**
-- **Require a wireless provider that had to relocate small cell facilities colocated on a nonauthority pole to comply with terms and standards adopted by the governing board of a municipally owned electric utility.**
-- **Permit the governing body of a municipally owned electric utility to require a wireless provider to defend, indemnify, or hold harmless an authority, the governing body, and its employees, agents, and officers against any claims resulting from working on wireless facilities, wireless support structures, or utility poles.**
-- **Provide that the circuit court would have jurisdiction to determine all disputes arising under the Act.**
-- **Permit an authority, as a condition of obtaining a permit, to adopt bonding requirements for small cell wireless facilities if certain requirements were met.**

Senate Bill 894 (S-1) would amend the Michigan Zoning Enabling Act to provide that the Act and a zoning ordinance would be subject to the proposed Small Wireless Communications Facilities Deployment Act.

Each bill would take effect 90 days after it was enacted. Senate Bill 894 (S-1) is tie-barred to Senate Bill 637 (S-2).

Senate Bill 637 (S-2) is described in more detail below.

Definitions

"Authority", unless the context implied otherwise, would mean the State, or a county, township, city, village, district, or subdivision thereof authorized by law to make legislative, quasi-judicial, or administrative decisions concerning an application described in the proposed Act. The term would not include any of the following:

-- A municipally owned electric utility.
-- An investor-owned utility whose rates are regulated by the Michigan Public Service Commission (MPSC).
-- A State court having jurisdiction over an authority.

"Small cell wireless facility" would mean a wireless facility that meets both of the following requirements:

-- Each antenna is located inside an enclosure of not more than six cubic feet in volume or, in the case of an antenna that has exposed elements, the antenna and all of its exposed elements would fit within an imaginary enclosure of not more than six cubic feet.
-- All other wireless equipment associated with the facility is cumulatively not more than 25 cubic feet in volume.

(The following types of associated ancillary equipment would not be included in the calculation of equipment volume: electric meters, concealment elements, telecommunications demarcation boxes, ground-based enclosures, grounding equipment, power transfer switches, cut-off switches, and vertical cable runs for the connection of power and other services.)

"Colocate" or "collocation" would mean to install, mount, maintain, modify, operate, or replace wireless facilities on or adjacent to a wireless support structure or utility pole. The term would not include make-ready work or the installation of a new utility pole or new wireless support structure.

("Make-ready work" would mean work necessary to enable an authority pole or utility pole to support collocation, which could include modification or replacement of utility poles or modification of lines.)

"Public right-of-way" or "ROW" would mean the area on, below, or above a public roadway, highway, street, alley, bridge, sidewalk, or utility easement, dedicated for compatible uses. The term would not include any of the following:

-- A private right-of-way.
-- A limited access highway.
-- Land owned or controlled by a railroad as defined in the Railroad Code.
-- Railroad infrastructure.

"Wireless facility" would mean equipment at a fixed location that enables the provision of wireless services between user equipment and a communications network, including radio transceivers, antenna, coaxial or fiber-optic cable, regular and backup power supplies, and comparable equipment, regardless of technological configuration. It also would include a small cell wireless facility. The term would not include any of the following:

-- The structure or improvements on, under, or within which the equipment is colocated.
-- A wireline backhaul facility (a facility used to transport services by wire or fiber-optic cable from a wireless facility to a network).
-- Coaxial or fiber-optic cable between utility poles or wireless support structures or that otherwise is not immediately adjacent to or directly associated with a particular antenna.

"Wireless services" would mean any services, provided using licensed or unlicensed spectrum, including the use of wi-fi, whether at a fixed location or mobile.

"Wireless provider" would mean a wireless infrastructure provider or a wireless services provider. It would not include an investor-owned utility whose rates are regulated by the MPSC.

"Wireless infrastructure provider" would mean any person, including a person authorized to provide telecommunications services in the State, but not including a wireless services provider, that builds or installs wireless communication transmission equipment, wireless facilities, or wireless support structures and that, when filing an application with an authority under the proposed Act, provides written authorization to perform the work on behalf of a wireless services provider.

"Wireless support structure" would mean a freestanding structure designed to support or capable of supporting small cell wireless facilities. It would not include a utility pole.

Purpose of the Act

The stated purpose of the proposed Act would be to do all of the following:

-- "Increase investment in wireless networks that will benefit the citizens of the state by providing better access to emergency services, advanced technology, and information."
-- "Increase investment in wireless networks that will enhance the competitiveness of the state in the global economy."
-- "Encourage the deployment of advanced wireless services by streamlining the process for the permitting, construction, modification, maintenance, and operation of wireless facilities in the public rights-of-way."
-- "Allow wireless services providers and wireless infrastructure providers access to the public rights-of-way and the ability to attach to poles and structures in the public rights-of-way to enhance their networks and provide next generation services."
-- "Ensure the reasonable and fair control and management of public rights-of-way by governmental authorities within the state."
-- "Address the timely design, engineering, permitting, construction, modification, maintenance, and operation of wireless facilities as matters of statewide concern and interest."
-- "Provide for the management of public rights-of-way in a safe and reliable manner that does all of the following:" supports new technology; avoids interference with right-of-way use by existing public utilities and cable communications providers; allows for a level playing field for competitive communications service providers; and protects public health, safety, and welfare.
-- "Increase the connectivity for autonomous and connected vehicles through the deployment of small cell wireless facilities with full access and compatibility for connected and autonomous vehicles as determined and approved by the state transportation department, county road commissions, and authorities."
-- "Prioritize, as provided in this act, the use of existing utility poles and wireless support structures for collocation over the installation of new utility poles or wireless support structures."

"Communications service provider" would mean any entity that provides communications service. "Communications service" would mean service provided over a communications facility, including cable service, as defined in 47 USC 522(6) (the one-way transmission to subscribers of video programming and other programming service, and subscriber interaction, if any, that is required for the selection or use of such programming or programming service), information service, as defined in 47 USC 153(24) (the offering of a capability for generating, acquiring, storing,

transforming, processing, retrieving, using, or making available information via telecommunications, including electronic publishing, but not including any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service), telecommunications service, as defined in 47 USC 153(53) (the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used), or wireless service.

"Communications facility" would mean the set of equipment and network components, including wires, cables, antennas, and associated facilities, used by a communications service provider to provide communications service.

Prohibited Regulation; Collocation Approval

Except as otherwise provided in the proposed Act, an authority could not prohibit, regulate, or charge for the collocation of small cell wireless facilities.

The approval of a small cell wireless facility would authorize only the collocation of a small cell wireless facility and would not authorize either of the following:

-- The provision of any particular services.
-- The installation, placement, modification, maintenance, or operation of a wireline backhaul facility in an ROW.

Right-of-Way Use

The following provisions would apply only to activities of a wireless provider within a public right-of-way for the deployment of small cell wireless facilities and associated new or modified utility poles.

("Utility pole" would mean a pole or similar structure that is or may be used in whole or in part for cable or wireline communications service, electric distribution, lighting, traffic control, signage, or a similar function, or a pole or similar structure that does not exceed 40 feet above ground level, unless a taller height is agreed to by an authority, and is designed to support small cell wireless facilities. The term would not include a sign pole less than 15 feet in height above ground.)

An authority could not enter into an exclusive arrangement with any person for use of an ROW for the construction, operation, marketing, or maintenance of utility poles or the collocation of small cell wireless facilities.

An authority could not charge a wireless provider a rate for each utility pole or wireless support structure in an ROW in the authority's geographic jurisdiction on which the wireless provider colocated a small cell wireless facility that exceeded the following:

-- $20 annually, unless the following applied.
-- $125 annually, if the utility pole or wireless support structure were erected by or on behalf of the wireless provider on or after the effective date of the proposed Act, unless the replacement of the utility pole was not designed to support small cell wireless facilities.

Every five years after the Act took effect, the maximum rates then authorized would be increased by 10% and rounded to the nearest dollar.

If, on the date the Act took effect, an authority had a rate or fee in an ordinance or in an agreement with a wireless provider for the use of an ROW to colocate a small cell wireless facility or to construct, install, mount, maintain, modify, operate, or replace a utility pole, and the rate or fee did not comply with the limitations listed above, the authority would have to revise the rate or fee within 90 days after the Act took effect.

For installations of utility poles designed to support small cell wireless facilities or collocations of small cell wireless facilities installed and operational in an ROW before the date the Act took effect, the fees, rates, and terms of an agreement or ordinance for use of the ROW would remain in effect subject to the termination provisions contained in the agreement or ordinance.

For installations of utility poles designed to support small cell wireless facilities or collocations of small cell wireless facilities installed and operational in an ROW after the date the Act took effect, the fees, rates, and terms of an agreement or ordinance for use of the ROW would have to comply with the rates proposed above.

A wireless provider could, as a permitted use not subject to zoning review or approval, except that an application for a permitted use would still be subject to approval by the authority, colocate small cell wireless facilities and construct, maintain, modify, operate, or replace utility poles in, along, across, upon, and under an ROW. Such structures and facilities would have to be constructed and maintained so as not to obstruct the legal use of the authority's ROW or uses of the ROW by other utilities and communications service providers. Both of the following provisions would apply:

-- A utility pole in the ROW installed or modified on or after the date the proposed Act took effect could not exceed 40 feet above ground level, unless the authority agreed to a taller height.
-- A small cell wireless facility in the ROW installed or modified after the date the Act took effect could not extend more than five feet above a utility pole or wireless support structure on which the facility was colocated.

Subject to these and other provisions, and applicable zoning regulations, a wireless provider could colocate a small cell wireless facility or install, construct, maintain, modify, operate, or replace a utility pole that exceeded the specified height limits, or a wireless support structure, in, along, across, upon, and under the ROW.

A wireless provider would have to comply with reasonable and nondiscriminatory requirements otherwise provided that prohibited communications service providers from installing structures on or above ground in the ROW in an area designated solely for underground or buried cable and utility facilities if all of the following applied:

-- The authority had required all cable and utility facilities, other than authority poles, along with any attachments, or poles used for street lights, traffic signals, or other attachments necessary for public safety, to be placed underground by a date that was at least 90 days before the submission of an application.
-- The authority did not prohibit the replacement of authority poles by a wireless provider in the designated area.
-- The authority allowed wireless providers to apply for a waiver of the undergrounding requirements for the placement of a new utility pole to support small cell wireless facilities, and the waiver applications were addressed in a nondiscriminatory manner.

Subject to permit provisions (described below), and except for facilities excluded from evaluation for effects on historic properties under 47 CFR 1.1307(a)(4), an authority could adopt written, objective requirements for reasonable, technically feasible, nondiscriminatory, and technologically neutral design or concealment measures in a historic district, downtown district, or residential zoning district. Any such requirement could not have the effect of prohibiting any wireless provider's technology. Any such design or concealment measures would not be considered a part of the small wireless facility for purposes of the size restrictions in the definition of small wireless facility.

(Under 47 CFR 1.1307(a)(4), applicants must prepare environment assessments if the Federal Communications Commission (FCC) takes action with respect to facilities that may affect districts, sites, buildings, structures, or objects, significant in American history, architecture, archeology, engineering or culture, that are listed, or are eligible for listing, in the National Register of Historic Places, and that are subject to review by the FCC and have been determined through that review

process to have adverse effects on identified historic properties. (The term "applicant" includes an applicant for a wireless or broadband license, authorization, or antenna structure registration.)

"Historic district" would mean a historic district established under the Local Historic Districts Act, or a group of buildings, properties, or sites that are either listed in the National Register of Historic Places or formally determined eligible for listing by the Keeper of the National Register, the individual who has been delegated the authority by the Federal agency to list properties and determine their eligibility for the National Register, in accordance with the Nationwide Programmatic Agreement.)

An authority's administration and regulation of wireless providers' activities in the ROW would have to be reasonable, nondiscriminatory, and competitively neutral and would have to comply with applicable law.

An authority could require a wireless provider to repair all damage to an ROW directly caused by the activities of the provider while occupying, constructing, installing, mounting, maintaining, modifying, operating, or replacing small cell wireless facilities, utility poles, or wireless support structures in the ROW and to return it to its functional equivalence before the damage. If the provider failed to make the repairs required by the authority within 60 days after written notice, the authority could make the repairs and charge the wireless provider the reasonable, documented cost of repairs.

Permit

The following provisions would apply to activities of a wireless provider within a public ROW.

Except as otherwise provided, an authority could require a permit to colocate a small cell wireless facility or install, modify, or replace a utility pole on which a small cell wireless facility would be colocated if the permit were of general applicability. The processing of an application for such a permit would be subject to all of the following:

-- The authority could not directly or indirectly require an applicant to perform services unrelated to the collocation for which a permit was sought, such as reserving fiber, conduit, or pole space for the authority or making other in-kind contributions to the authority.
-- A wireless provider would have to provide, to each affected authority to which an application for the activity was not submitted, notification of the wireless provider's intent to locate a small cell wireless facility within the ROW, if a proposed activity would occur within a shared ROW or an ROW that overlapped another ROW, and the authority could require proof of other necessary permits, permit applications, or easements to ensure all necessary permissions for the proposed activity were obtained.
-- The authority could require an applicant to include an attestation that the small cell wireless facilities would be operational for use by a wireless services provider within one year after the permit was issued, unless the authority and the applicant agreed to extend the period or delay was caused by lack of commercial power or communications transport facilities to the site.
-- The application would have to be processed on a nondiscriminatory basis.
-- Approval of an application would authorize the wireless provider to undertake an installation or collocation and maintain the small cell wireless facilities and any associated utility poles or wireless support structures covered by the permit for as long as the site was in use and in compliance with the initial permit, subject to relocation requirements that would apply to similarly situated users of an ROW and the applicant's right to terminate at any time.
-- An authority could not institute a moratorium on filing, receiving, or processing applications or issuing permits for the collocation of small cell wireless facilities or the installation, modification, or replacement of utility poles on which the facilities could be colocated.
-- An authority and an applicant could extend a time period by mutual agreement.

Within 25 days after receiving an application, an authority would have to notify the applicant in writing whether the application was complete. If the application were incomplete, the notice would

have to clearly and specifically delineate missing documents or information. The notice would toll the running of the time for approving or denying an application as described below.

The running of the time period tolled would resume when the applicant made a supplemental submission in response to the authority's notice of incompleteness. If a supplemental submission were inadequate, the authority would have to notify the applicant in writing within 10 days after receiving the supplemental submission that it did not provide the information identified in the original notice delineating missing documents or information. The time period could be tolled in the case of second or subsequent notices under the procedures identified above. Second or subsequent notices of incompleteness could not specify missing documents or information that was not delineated in the original notice.

An authority would have to approve or deny an application and notify the applicant in writing within the following period of time after the application was received:

-- 60 days, for an application for the collocation of small cell wireless facilities on a utility pole, subject to the following adjustments: an additional 15 days if an application from another wireless provider were received within one week of the application in question, and an additional 15 days if, before the otherwise applicable 60-day or 75-day time period elapsed, the authority notified the applicant in writing that an extension was needed and the reasons for the extension.
-- 90 days, for an application for a new or replacement utility pole that would not exceed 40 feet above ground level, unless a taller height was agreed to by the authority, and associated small cell facility, subject to the following adjustments: an additional 15 days if an application from another wireless company were received within one week of the application in question; and an additional 15 days if, before the otherwise applicable 90-day or 105-day time period elapsed, the authority notified the application in writing that an extension was needed and the reasons for the extension.

If an authority failed to comply with these provisions, the completed application would be considered approved subject to the condition that the applicant provide the authority at least 7 days' advance written notice that the applicant would be proceeding with the work pursuant to this automatic approval.

An authority could deny a completed application for a proposed collocation of a small cell wireless facility or installation, modification, or replacement of a utility pole that would not exceed 40 feet above ground level, unless a taller height was agreed to by the authority, only if the proposed activity would do any of the following:

-- Materially interfere with the safe operation of traffic control equipment.
-- Materially interfere with sight lines or clear zones for transportation or pedestrians.
-- Materially interfere with compliance with the Americans with Disabilities Act, or similar Federal, State, or local standards regarding pedestrian access or movement.
-- Materially interfere with maintenance or full unobstructed use of public utility infrastructure under the jurisdiction of an authority.
-- Materially interfere with maintenance or full unobstructed use of the drainage infrastructure as it was originally designed, or not be located a reasonable distance from the drainage infrastructure to ensure maintenance under the Drain Code and access to the drainage infrastructure, with respect to drainage infrastructure under the jurisdiction of an authority.
-- Fail to comply with reasonable, nondiscriminatory, written spacing requirements of general application adopted by ordinance or otherwise that applied to the location of ground-mounted equipment and new utility poles that did not prevent a wireless provider from serving any location.
-- Fail to comply with applicable codes.
-- Fail to comply with provisions pertaining to underground or buried cables, or historic districts.
-- Fail to meet reasonable, objective, written stealth or concealment criteria for small cell wireless facilities applicable in a historic district or other designated area, as specified in an ordinance

and nondiscriminatorily applied to all other occupants of an ROW, including electric utilities, incumbent or competitive local exchange carriers, fiber providers, cable television operators, and the authority.

An authority could require an applicant to provide information and documentation to enable the authority to make a decision with regard to the criteria listed above. An authority also could require a certification of compliance with FCC rules related to radio frequency emissions from a small cell wireless facility.

If the completed application were denied, the written notice to the applicant would have to explain the reasons for the denial and, if applicable, cite the specific provisions of applicable codes on which the denial was based. The applicant could cure the deficiencies identified by the authority and resubmit the application within 30 days after the denial without paying an additional application fee. The authority would have to limit its review of the revised application to the deficiencies cited in the denial.

An applicant could at its discretion file a consolidated application and receive a single permit for the collocation of up to 20 small cell wireless facilities within the jurisdiction of a single authority or, in the case of the Michigan Department of Transportation (MDOT), a single designated control section as identified on MDOT's website. The small cell facilities within a consolidated application would have to consist of substantially similar equipment and be placed on similar types of utility poles or wireless support structures. An authority could approve a permit for one or more small cell wireless facilities included in a consolidated application and deny a permit for the remaining small cell facilities. An authority could not deny a permit for a small cell facility included in a consolidated application on the basis that a permit was being denied for one or more other facilities included in that application.

Within one year after a permit was granted, a wireless provider would have to complete collocation of a small cell wireless facility that was to be operational for use by a wireless services provider, unless the authority and the applicant agreed to extend the period or the delay was caused by the lack of commercial power or communications facilities at the site. If the wireless provider failed to complete the collocation within the applicable time, the permit would be void and the wireless provider could reapply for a permit. A permittee could voluntarily request that the permit be terminated.

An authority could revoke a permit, upon 30 days' notice and an opportunity to cure, if the permitted small cell wireless facilities and any associated utility pole failed to meet the requirements listed above as reasons for which an authority could deny a completed application.

An authority could not require a permit or any other approval or require fees or rates for any of the following:

-- The replacement of a small cell wireless facility with a small cell wireless facility that was not larger or heavier, in compliance with applicable codes.
-- Routine maintenance of a small cell wireless facility, utility pole, or wireless support structure.
-- The installation, placement, maintenance, operation, or replacement of micro wireless facilities that were suspended on cables strung between utility poles or wireless support structures in compliance with applicable codes.

These activities would be exempt from zoning review.

An authority that received an application to place a new utility pole could propose an alternative location within an ROW or on property or structures owned or controlled by an authority within 75 feet of the proposed location to either place the new utility pole or colocate on an existing structure. The applicant would have to use the alternative location if, as determined by the applicant, it had the right to do so on reasonable terms and conditions and the alternative location did not impose unreasonable technical limits or significant additional costs.

Before discontinuing its use of a small cell wireless facility, utility pole, or wireless support structure, a wireless provider would have to notify an authority in writing. The notice would have to specify when and how the wireless provider intended to remove the small cell wireless facility, utility pole, or wireless support structure. The authority could impose reasonable and nondiscriminatory requirements and specifications for the wireless provider to return the property to its preinstallation condition. If the wireless provider did not complete the removal within 45 days after the discontinuance of use, the authority could complete the removal and assess the costs of removal against the wireless provider. A permit for a small cell wireless facility would expire upon removal of the facility.

An authority would not be prohibited from requiring a permit for work that would reasonably affect traffic patterns or obstruct vehicular or pedestrian traffic in an ROW.

"Micro wireless facility" would mean a small cell wireless facility that is not more than 24 inches in length, 15 inches in width, and 12 inches in height and that does not have an exterior antenna more than 11 inches in length.

"Applicable codes" would mean uniform building, fire, electrical, plumbing, or mechanical codes adopted under the Single State Construction Code Act, or adopted by the United States Occupational Safety and Health Administration or by a state or national code organization, including the National Electrical Safety Code published by the Institute of Electrical and Electronic Engineers.

Permit Fee

An application fee for a permit to colocate a small cell wireless facility, or install, modify, or replace a utility pole on which such a facility would be collocated, could not exceed the lesser of the following:

-- $200 for each small cell wireless facility alone.
-- $300 for each small cell wireless facility and a new utility pole to which it would be attached.

Every five years after the proposed Act took effect, the maximum fees then authorized would be increased by 10% and rounded to the nearest dollar.

Zoning Approval; Review

The provisions discussed below would apply to zoning reviews for the following activities that would be subject to zoning review and approval, that would not be a permitted use, and that took place within or outside a public ROW:

-- The modification of existing or installation of new small cell wireless facilities.
-- The modification of existing or installation of new wireless support structures used for such facilities.

Within 30 days after receiving an application for a zoning approval, an authority would have to notify the applicant in writing whether the application was complete. If the application were incomplete, the notice would have to clearly and specifically delineate all missing documents or information. The notice would toll the running of the 30-day period.

The running of the time period tolled would resume when the applicant made a supplemental submission in response to the authority's notice of incompleteness. If a supplemental submission were inadequate, the authority would have to notify the applicant within 10 days after receiving the submission that it did not provide the information identified in the original notice delineating missing documents or information. The time period could be tolled in the case of second or subsequent notices under the procedures identified above. Second or subsequent notices of

incompleteness could not specify missing documents or information that was not delineated in the original notice of incompleteness.

The application for a zoning approval would have to be processed on a nondiscriminatory basis.

An authority would have to approve or deny an application and notify the applicant in writing within 90 days after an application for a modification of a wireless support structure or installation of a small cell wireless facility was received or 150 days after an application for a new wireless support structure was received. The time period for approval could be extended by mutual agreement between the applicant and authority. If the authority failed to comply with these provisions, the application would be considered approved subject to the condition that the applicant provide the authority at least 15 days' advance written notice that the applicant would be proceeding with the work pursuant to this automatic approval.

An authority could not deny an application unless all of the following applied:

-- The denial was supported by substantial evidence contained in a written record that was publicly released contemporaneously.
-- There was a reasonable basis for the denial.
-- The denial would not discriminate against the applicant with respect to the placement of the facilities of other wireless providers.

An authority's review of an application for a zoning approval would be subject to all of the following:

-- An authority could not evaluate or require an applicant to submit information about an applicant's business decisions with respect to any of the following: the need for a wireless support structure or small cell wireless facilities; or the applicant's service, customer demand for the service, or the quality of service.
-- Any requirements regarding the appearance of facilities, including those relating to materials used or arranging, screening, or landscaping, would have to be reasonable.
-- Any setback or fall zone requirement would have to be substantially similar to such a requirement imposed on other types of commercial structures of a similar height.

An applicant's business decision on the type and location of small cell wireless facilities, wireless support structures or technology to be used would be presumed to be reasonable. This presumption would not apply with respect to the height of wireless facilities or wireless support structures. An authority could consider the height of such structures in its zoning review, but could not discriminate between the applicant and other communications service providers.

An application fee for a zoning approval could not exceed the following:

-- $1,000 for a new wireless support structure or a modification of an existing wireless support structure.
-- $500 for a new small cell wireless facility or modification of an existing small cell wireless facility.

Within one year after a zoning approval was granted, a wireless provider would have to commence construction of the approved structure or facilities that were to be operational for use by a provider, unless the authority and the applicant agreed to extend the period or the delay was caused by a lack of commercial power or communications facilities at the site. If the provider failed to commence construction within the time period required, the zoning approval would be void, and the provider could reapply for a zoning approval. However, the provider could voluntarily request that the zoning approval be terminated.

An authority could not institute a moratorium on either of the following: filing, receiving, or processing applications for zoning approval; or issuing approvals for installations that were not a permitted use.

An authority could revoke a zoning approval, upon 30 days' notice and an opportunity to cure, if the permitted small cell wireless facilities and any associated wireless support structure failed to meet the requirements of the approval, applicable codes, or applicable zoning requirements.

Collocation Rates & Fees

An authority could not enter into an exclusive arrangement with any person for the right to attach to authority poles. A person who purchased, controlled, or otherwise acquired an authority pole would be subject to the requirements described below.

("Authority pole" would mean a utility pole owned or operated by an authority and located in the ROW.)

The rate for the collocation of small cell wireless facilities on authority poles would have to be nondiscriminatory regardless of the services provided by the collocating person. The rate could not exceed $30 per year per authority pole. Every five years after the date the proposed Act took effect, the maximum rate then authorized would be increased by 10% and rounded to the nearest dollar. This rate for the collocation of small cell wireless facilities on authority poles would be in addition to the rate charged for the use of an ROW.

If, on the date the Act took effect, an authority had a rate, fee, or other term in an ordinance or in an agreement with a wireless provider that did not comply with these provisions, the authority would have to revise the rate, fee, or term, within 90 days after that date. Both of the following would apply:

-- An ordinance or agreement between an authority and a wireless provider that was in effect on the date the Act took effect and that related to the collocation on authority poles of small cell wireless facilities installed and operational before that date would remain in effect as it related to those collocations, subject to termination provisions in the ordinance or agreement.
-- The rates, fees, and terms established in the Act would apply to the collocation on authority poles of small cell wireless facilities that were installed and operational after the rates, fees, and terms took effect.

Within 90 days after receiving the first request to colocate a small cell wireless facility on an authority pole, the authority would have to make available, through ordinance or otherwise, the rates, fees, and terms for the collocation of small cell wireless facilities on the authority poles. The rates, fees, and terms would have to comply with all of the following:

-- The rates, fees, and terms would have to be nondiscriminatory, competitively neutral, and commercially reasonable.
-- The authority would have to provide a good-faith estimate for any make-ready work within 60 days after receiving a complete application, and any make-ready work would have to be completed within 60 days of the applicant's written acceptance of the good-faith estimate.
-- The person owning or controlling the authority pole could not require more make-ready work than required to comply with law or industry standards.

Fees for make-ready work could not: include costs related to preexisting or prior damage or noncompliance unless the damage or noncompliance was caused by the applicant; include any unreasonable consultant fees or expenses; or exceed actual costs imposed on a nondiscriminatory basis.

These provisions would not require an authority to install or maintain any specific authority pole or to continue to install or maintain authority poles in any location if the authority made a nondiscriminatory decision to eliminate aboveground poles of a particular type generally, such as electric utility poles, in a designated area of its geographic jurisdiction. For authority poles with colocated small cell wireless facilities in place when an authority made a decision to eliminate aboveground poles of a particular type, the authority would have to do one of the following:

-- Continue to maintain the authority pole.
-- Install and maintain a reasonable alternative pole or wireless support structure for the collocation of the small cell wireless facility.
-- Offer to sell the pole to the wireless provider at a reasonable cost.
-- Allow the wireless provider to install its own utility pole so it could maintain service from that location.
-- Proceed as provided by an agreement between the authority and the wireless provider.

Municipally Owned Electric Utility

"Municipally owned electric utility" would mean a system owned by a municipality or combination of municipalities to furnish power or light and would include a cooperative electric utility that, on or after the date the proposed Act took effect, acquired all or substantially all of the assets of a municipal electric utility, when applying the Act to the former territory of the municipal electric utility.

The governing body of a municipally owned electric utility could not enter into an exclusive agreement with any person for the right to attach to nonauthority poles, and would have to allow the collocation of small cell wireless facilities on nonauthority poles on a nondiscriminatory basis.

The collocation of small cell wireless facilities on nonauthority poles by a wireless provider would have to comply with the applicable, nondiscriminatory safety and reliability standards adopted by the governing body of a municipally owned electric utility and with the Natural Electric Safety Code published by the Institute of Electrical and Electronics Engineers. The governing body could require a wireless provider to execute an agreement if such an agreement were required of all other nonauthority pole attachments.

The governing body of a municipally owned electric utility would have to adopt a nondiscriminatory and competitively neutral process for requests by wireless providers to colocate small cell wireless facilities on nonauthority poles. If such a process had not been adopted within 90 days after the date the proposed Act took effect, the application process for a permit within a public ROW would apply to such requests. The governing body of a municipally owned electric utility could not impose a moratorium on the processing of nonauthority pole collocation requests, or require a wireless provider to perform any service not directly related to the collocation. The governing body could charge a maximum fee of $100 per nonauthority pole for processing the request. The governing body also could charge an additional fee of up to $100 per nonauthority pole for processing the request, if a modification or maintenance of the collocation required an engineering analysis. Every five years after the date the Act took effect, the maximum fees then authorized would be increased by 10% and rounded to the nearest dollar.

The rate for a wireless provider to colocate on a nonauthority pole in an ROW could not exceed $50 annually per nonauthority pole. Every five years after the date the proposed Act took effect, the maximum rate then authorized would be increased by 10% and rounded to the nearest dollar.

A wireless provider would have to comply with the process for make-ready work that the governing body of a municipally owned electric utility had adopted for other parties under the same or similar circumstances that attached facilities to nonauthority poles. If such a process had not been adopted, the wireless provider and the governing body would have to comply with the process for make-ready work under 47 USC 224 and implementing orders and regulations. (That section of the U.S. Code pertains to attachments by a cable television system or telecommunications service provider to a pole, duct, conduit, or right-of-way owned or controlled by a utility.) A good-faith estimate established by the governing body for any make-ready work for nonauthority poles would have to include pole replacement, if necessary. All make-ready costs would have to be based on actual costs, with detailed documentation provided.

If a wireless provider were required to relocate small cell facilities colocated on a nonauthority pole, it would have to do so in accordance with the nondiscriminatory terms adopted by the governing body of a municipally owned electric utility.

An attaching entity, and all contractors or parties under its control, would have to comply with reliability, safety, and engineering standards adopted by the governing body of a municipally owned electric utility, including the following:

-- Applicable engineering and safety standards governing installation, maintenance, and operation of facilities and the performance of work in or around the municipally owned electric utility nonauthority poles and facilities.
-- The National Electric Safety Code.
-- Regulations of the U.S. Occupational Safety and Health Administration.
-- Other reasonable safety and engineering requirements to which municipally owned electric facilities were subject by law.

The governing body of a municipally owned electric utility could require an attaching entity to execute an agreement for wire or cable attachments to nonauthority poles or related infrastructure.

The governing body of a municipally owned electric utility could not charge an attaching entity a rate for wire or cable pole attachments within the communication space on a nonauthority pole greater than the maximum allowable rate pursuant to 47 USC 224(d) and (e) as established in FCC Order on Reconsideration 15-151. ("Communication space" would mean that term as defined in the National Electric Safety Code. Under 42 USC 224, rates must be just and reasonable. Section 224(d) provides for a determination of whether a rate is just and reasonable, and Section 224(e) requires any increase in the rates for pole attachments from the adoption of regulations to be phased in equal annual increments over a period of five years.)

Subject to proposed provisions pertaining to court action (described below), an attaching entity could commence a civil action for injunctive relief for a violation these provisions. The attaching entity could not file an action unless it had first given the municipally owned electric utility a written notice of the intent to sue. Within 30 days after the utility received the notice of intent to sue, the utility and the attaching entity would have to meet and make a good-faith attempt to determine if there was a credible basis for the action. If the parties agreed that there was a credible basis for the action, the governing body of the utility would have to take all reasonable and prudent steps necessary to comply with the applicable requirements within 90 days after the meeting.

Requirement to Indemnify, Defend, or Insure

With respect to a small cell wireless facility, a wireless support structure, or a utility pole, as part of the permit process for activities of a wireless provider within the public ROW, a zoning approval process for the modification or installation of new small cell wireless facilities or wireless support structures, or a request process for wireless providers to colocate small cell wireless facilities on nonauthority poles, an authority or the governing body of a municipally owned electric utility could require a wireless provider to defend, indemnify, and hold harmless the authority or the governing body, and its officers, agents, and employees, against any claims, demands, damages, lawsuits, judgments, costs, liens, losses, expenses, and attorney fees resulting from the installation, construction, repair, replacement, operation, or maintenance of any wireless facilities, wireless support structures, or utility poles to the extent caused by the applicant, its contractors, its subcontractors, and the officers, employees, or agents of any of those. A wireless provider would have no obligation to defend, indemnify, or hold harmless an authority or governing body, or its officers, agents, or employees, against any liabilities or losses due to or caused by the sole negligence of the authority or the governing body, or its officers, employees, or agents.

Additionally, an authority or the governing body of a municipally owned electric utility could require a wireless provider to obtain insurance naming the authority or the governing body, and its officers, agents, and employees, as additional insureds against any claims, demands, damages, lawsuits,

judgments, costs, liens, losses, expenses, and attorney fees. A wireless provider could meet all or a portion of the authority's insurance coverage and limit requirements by self-insurance. To the extent a wireless provider self-insured, it would have to provide to the authority evidence demonstrating, to the authority's satisfaction, the provider's financial ability to meet the authority's insurance coverage and limit requirements.

Authority Limitations

An authority would not have jurisdiction or authority over the design, engineering, construction, installation, or operation of a small cell wireless facility located in an interior structure or upon a campus of an institution of higher education, including any stadiums or athletic facilities associated with the institution, a professional stadium, or a professional athletic facility, other than to enforce applicable codes. The proposed Act would not authorize the State or any other authority to require wireless facility deployment or to regulate wireless services.

Fees Less than Maximum

Subject to other requirements of the proposed Act, an authority could establish a fee or rate less than the maximum specified for utility poles or wireless support structures in an ROW in the authority's geographic jurisdiction on which a wireless provider had colocated a small cell wireless facility, a permit application, zoning approval application, or the collocation of small cell facilities on authority poles.

Dispute Resolution

The circuit court would have jurisdiction to determine all disputes arising under the proposed Act. Venue would lie in the judicial circuit where an authority or municipally owned electric utility was located. In addition to its right to appeal to the circuit court, an applicant could elect, at its sole discretion, to appeal a determination under the Act to an authority, if the authority had an appeal process to render a decision expeditiously.

Bonding Requirements

As a condition of a permit described in the proposed Act, an authority could adopt bonding requirements for small cell wireless facilities if the authority imposed similar requirements in connection with permits issued for similarly situated users of an ROW. The purpose of the bonds would have to be one or more of the following:

-- To provide for the removal of abandoned or improperly maintained small cell wireless facilities, including those that an authority determined should be removed to protect public health, safety, or welfare.
-- To repair the ROW as provided by the Act.
-- To recoup rates or fees that a wireless provider had not paid in more than 12 months, if the provider had received 60-day advance notice from the authority of noncompliance.

An authority could not require a cash bond unless the wireless provider had failed to obtain or maintain a bond required under these provisions, or the surety had defaulted or failed to perform on a bond given to the authority on behalf of the wireless provider. Also, an authority could not require a bond in an amount exceeding $1,000 per small cell wireless facility.

Scope of Act; MPSC Jurisdiction

The proposed Act would not impose or otherwise affect any rights, controls, or contractual obligations of an investor-owned utility whose rates are regulated by the Michigan Public Service Commission, an affiliated transmission company, an independent transmission company, or a cooperative electric utility (unless it acquired all or substantially all of the assets of a municipal

electric utility after the Act's effective date) with respect to its poles or conduits, similar structures, or equipment of any type.

The Act also would not add to, replace, or supersede any law regarding poles or conduits, similar structures, or equipment of any type owned or controlled by any of those entities.

Except for the purposes of a wireless provider obtaining a permit to occupy an ROW, the Act would not affect an investor-owned utility whose rates are regulated by the MPSC. Notwithstanding any other provision of the Act, the MPSC would have sole jurisdiction over attachment of wireless facilities on the poles, conduits, and similar structures or equipment of any type or kind owned or controlled by an investor-owned utility whose rates are regulated by the MPSC.

Other Provisions

A small cell wireless facility for which a permit was issued would have to be labeled with the name of the wireless provider, emergency contact telephone number, and information that identified the facility and its location.

A wireless provider would be responsible for arranging and paying for the electricity used to operate a small cell wireless facility.

MCL 125.3205 (S.B. 894)

ARGUMENTS

(Please note: The arguments contained in this analysis originate from sources outside the Senate Fiscal Agency. The Senate Fiscal Agency neither supports nor opposes legislation.)

Supporting Argument

The rapid proliferation and advancement of smartphones, tablets, and other wireless devices has placed a considerable strain on Michigan's communications infrastructure. The solution to easing this burden is the deployment of small cell technology, the next generation of wireless communications. Michigan led the nation in helping telecommunications carriers gain access to public rights-of-way through the enactment in 2002 of the Metropolitan Extension Telecommunications Rights-Of-Way Oversight Act, which was designed to streamline the process for authorizing access to and use of public ROWs, ensure the reasonable control and management of ROWs by municipalities, and provide for common public ROW maintenance fees.

Although the telecommunications industry has been working to obtain local government approval to place small cells on vertical structures in public ROWs across Michigan, the permitting process is slow and unpredictable, even when only a small antenna needs be attached to the top of an existing municipally owned pole. In other cases, many municipalities do not allow access to ROWs or they require noneconomically feasible fees for access. The bills would establish reasonable and standardized fees for attachment to municipally owned poles and structures, and would encourage timely approval of small cell locations and installation. Streamlining the permitting, installation, and maintenance processes associated with mounting small cell wireless facilities in a municipal ROW would bolster Michigan's existing wireless networks and make way for 5G networks and other coming improvements to wireless communications technology.

Compared to 4G networks, 5Gs are expected to be 100 times faster, support 100 times more devices, and provide five times faster response time, according to the CTIA, a trade association that represents the wireless communications industry. However, 5G cannot be implemented using the State's existing wireless infrastructure. The need to modernize this infrastructure is highlighted by the plans of AT&T to introduce mobile 5G service in a dozen markets by late 2018. 5G will operate using millimeter wave spectrum, which offers higher capacity rates than low-band spectrum. However, millimeter wave transmitters must be close to the ground and do not transmit over long distances, so AT&T plans on using small cells to launch its 5G network. The bills would create a regulatory environment conducive to the rollout of small cell technology to ensure that

the growing number of wireless consumers will have the reliable, on-demand coverage that they want and need when using their mobile devices and other technology.

Supporting Argument
In today's economy, access to the latest and most reliable wireless technology, as well as a fast and dependable communications network, is critical for business. Employers, employees, clients, and customers are becoming increasingly reliant on mobile devices and technology to stay connected and conduct business in the modern workplace. The deployment of a 5G network would promote economic growth and development in Michigan through greater broadband speeds and the new innovation that would come from the improved networks. A 2017 report from the American Consumer Institute Center for Citizen Research titled, "The Economic & Consumer Benefits from 5G", found that 5G is expected to generate nearly $8.5 billion in economic investment and more than 105,000 jobs in Michigan over the next seven years.

The bills would foster a regulatory environment that would encourage wireless providers to invest in the kind of network enhancements and upgrades that would keep Michigan's communications infrastructure on the forefront of innovation. Creating a predictable statewide framework designed to streamline the process for small deployment inclusive of rates and fees would allow wireless providers to meet the increasing consumer demands and needs, and invite capital investment in the State. Other states that have passed similar legislation adopted policies specifically aimed at inviting investment in small cell technology. The proposed legislation is important for encouraging continued economic growth and prosperity in Michigan.

Supporting Argument
The use of small cells is key to "smart" cities and the future of transportation and road safety. Many local governments have a vision of creating connected cities that would operate more smoothly and efficiently, and improve services, while simultaneously reducing taxpayers' costs. Recent innovations in wireless and mobile technology allow the development of this type of connected technology. Whether the goal is smart lighting, improved traffic management, autonomous vehicles, smart parking, disaster awareness, or WiFi kiosks, however, these innovations require more reliable wireless connectivity and increased data usage than are currently available.

Michigan also is on the cutting edge of autonomous and automated vehicle development. The operation and safety of connected and autonomous vehicles require infrastructure that will allow vehicles to communicate with each other on the road and with surrounding infrastructure, such as traffic signals and crosswalks, through the use of wireless and mobile communications technology. Connected vehicle technology could alert drivers to imminent crash situations, such as a blind-side merger or the sudden braking of a vehicle traveling in front of the driver. Connected infrastructure also could alert drivers when they entered school or construction zones, or when an upcoming traffic light was about to change.

Connected cities and autonomous and automated vehicle technology, however, require a quick and reliable wireless network in order to become a reality. Small cell technology is a critical component of implementing this type of connectivity. The bills would establish a streamlined process for small cell deployment to improve the way Michigan residents live and travel.

Response: Currently, there are several entities at the local, State, and Federal levels involved in the research and development of autonomous and connected vehicle technology. The bills would interfere with the deployment of hardware and technology necessary for autonomous and connected vehicles. Traffic signal systems and equipment for autonomous and connected vehicles is cutting-edge technology and adding small cells to authority or utility poles could create unforeseen problems.

Supporting Argument
The use of small cell technology would offer additional wireless capacity in high-traffic areas, which is key to advancing FirstNet throughout the State. FirstNet, which was created by AT&T in a public-private partnership with the First Responder Network Authority, is the country's first and only

nationwide public safety communications platform dedicated to first responders. FirstNet is a broadband LTE ("Long-Term Evolution") network that allows first responders and other public safety personnel to send and receive voice, data, video, images, and text without network congestion, and enables information-sharing across disciplines and jurisdictions. This new technology makes it even more critical for Michigan to support network deployments that build on advances in public safety and wireless communications technology. Having a dedicated public safety network would make it easier for police officers, firefighters, and EMTs to respond timely and effectively in times of need. By allowing easier small cell deployment, the bills would benefit members of the public and the first responders who serve them.

Supporting Argument

Modern agriculture is a highly competitive, high-tech, global business that is constantly evolving. Today, access to technology is a key factor in determining success for Michigan farms. As farming technology has improved to include GPS-steered equipment, wireless monitoring systems, and digital data collection, access to high-speed internet now is a necessity for farm operations. However, rural areas disproportionately lack access to high-speed wireless technology. According to a November 2017 article from The Center for Michigan, 37% of residents in rural areas of Michigan had no access to high speed broadband, and in some counties, 100% of rural residents had no access. Deploying small cell technology would strengthen wireless networks in rural areas by increasing the availability and reliability of high-speed wireless technology throughout Michigan. This would mean additional capacity, greater speeds, and a better overall wireless experience that would benefit farmers and rural business interests across the State.

Opposing Argument

Many townships and local governments have seen an increase in requests to build within their public ROWs. These include requests to erect small cell wireless facilities that are placed at street level on street lights and power and traffic light poles. Under the bills, wireless service providers would virtually have free rein to place these wireless facilities on utility poles with little or no local oversight of their placement or the number of facilities in an area, and no consideration for the aesthetics of the ROWs. The proposed definition of "small cell wireless facility" would permit wireless providers to install equipment that would have to fit within an imaginary space of not more than six cubic feet, and all the wireless equipment would have to be not more than 25 cubic feet in volume. Essentially, the legislation would allow these providers to attach industrial refrigerator-size equipment to poles. Space within ROWs is already at a premium and the bills would further limit access to these areas for pedestrians. Residents in local communities do not want this size or type of equipment outside of their homes. Additionally, many local planning commissions spend a lot of time determining how ROWs should look, and it would be unfair for the telecommunications industry to usurp local government control over the appearance of their ROWs. The bills would force local municipalities to litigate to preserve the residential character of their communities.

The bills also would take away a principal property interest from every community in the State without a commitment from the wireless industry as to what it would provide in exchange for this public, taxpayer-supported property. Even though Senate Bill 637 (S-2) discusses the charges that the local governments could collect from wireless providers, there is no discussion of what rates wireless providers could charge taxpaying customers for wireless service. If the people are going to have to maintain the ROWs with their taxpayer money, the wireless providers should have to pay a fair market value for use of the ROWs. In order to protect the best interests of constituents, nonessential infrastructure, such as small cell facilities, should be controlled and authorized by local governing units.

Opposing Argument

The bills would have a detrimental effect on public health as they do not include any medical accommodations for people with a sensitivity to radiation, electromagnetic fields (EMFs), and radio frequencies. Although reports on the health hazards of 4G are just now emerging, there is a growing body of evidence that the radiation emitted from wireless technology adversely affects the health of wildlife, farm animals, and humans, particularly those with a sensitivity to EMF

sources. This sensitivity to EMF emissions is generally called "electromagnetic hypersensitivity syndrome" (EHS), and is characterized by a wide variety of mild to severe dermatological, immunological, and neurological symptoms. Although many people believe there is no scientific evidence that links these reported symptoms to exposure to EMF, the World Health Organization has conducted research into the existence of EHS. It estimates that the reported prevalence of EHS is a few individuals per 1.0 million. The Bioinitiative Working Group, an international collaboration of scientists, researchers, and public health policy professionals, released reports detailing the negative effects of EMFs. These reports conclude that chronic exposure to low-level radiation, such as that emitted from cell phones, can cause a variety of cancers, impair people's immune systems, and contribute to Alzheimer's disease, dementia, and heart disease.

Small cell technology would add more man-made nonionizing microwave radiation to the environment, and current levels already make people ill. The FCC has yet to study all of the health effects of the widespread implementation of small cell technology. it should not be deployed until independent studies have been conducted to determine what kind of effect the nonionizing radiation from 5G could have on humans.

Legislative Analyst: Stephen Jackson

FISCAL IMPACT

Senate Bill 637 (S-2)

The bill would have an indeterminate fiscal impact on the State and a likely negative impact on local units of government.

The bill would set limits on permit application fees and annual rent fees that authorities could charge for the use or placement of utility poles within the right-of-way for small cell wireless providers. Authorities are defined in the bill to include the Department of Transportation, counties, townships, cities, and villages. The Department believes that the fees identified in the bill would be sufficient to cover the administrative costs associated with any work done in the portions of the ROW within its jurisdiction.

Local units of government do not currently have a standard rent or permitting fee structure for utility pole work done in the ROW. Fees most often vary based on actual costs, and may be larger or smaller than the limits identified in the bill due to several factors, including whether the ROW location is within an urban or rural setting, the available space within the ROW at that location, aesthetic considerations, potential damage to the ROW, and safety concerns. Some of these factors are addressed in the bill, as an authority could require a wireless provider to purchase insurance for work on the ROW and also could require a bond for any damage done to the ROW. The bill would prohibit an authority from charging a small cell wireless provider for unreasonable consultant fees associated with make-ready work, as defined in the bill. Many local units of government, particularly smaller counties, townships, and villages, do not have engineers or attorneys on staff who can review plans for work within the ROW. When those types of services would be required, the bill could prohibit those units of government from transferring the costs to the small cell wireless provider.

Senate Bill 894 (S-1)

The bill would subject existing zoning ordinances to Senate Bill 637 (S-2). It would not have a direct impact on the State or local units of government beyond its reference to the language found in Senate Bill 637 (S-2), which would exempt the activities of wireless providers within the ROW from zoning review.

Fiscal Analyst: Michael Siracuse

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This analysis was prepared by nonpartisan Senate staff for use by the Senate in its deliberations and does not constitute an official statement of legislative intent.