Bill as Introduced

6jan00.....2086h

HB 733 – AS AMENDED BY THE HOUSE

1999 SESSION

99-0161
10/09

HOUSE BILL ***733***

AN ACT relative to a state master plan for the deployment of personal wireless service facilities.

SPONSORS: Rep. Belvin, Hills 14; Rep. Bradley, Carr 8; Rep. N. Kaen, Straf 7

COMMITTEE: Science, Technology and Energy

ANALYSIS

This bill establishes a master plan for the orderly deployment of personal wireless service facilities in communities throughout the state.

Explanation: Matter added to current law appears in ***bold italics.***
Matter removed from current law appears [~~in brackets and struckthrough.~~]
Matter which is either (a) all new or (b) repealed and reenacted appears in regular type.

99-0161
10/09

STATE OF NEW HAMPSHIRE

In the Year of Our Lord One Thousand Nine Hundred and Ninety-Nine

AN ACT relative to a state master plan for the deployment of personal wireless service facilities.

Be it Enacted by the Senate and House of Representatives in General Court convened:

1 New Chapter; Deployment of Personal Wireless Service Facilities. Amend RSA by inserting after RSA 12-I the following new chapter:

DEPLOYMENT OF PERSONAL WIRELESS
SERVICE FACILITIES

12-J:1 Goals; Purpose.

I. The federal Telecommunications Act of 1996 regulates the deployment of wireless services in the United States. Its purpose is to make these services available to the American people quickly and in a very competitive manner.

II. The visual effects of tall antenna mounts or towers may go well beyond the physical borders between municipalities, and should be addressed so as to require that all affected parties have the opportunity to be heard.

III. Carriers wishing to build personal wireless service facilities (PWSFs) in New Hampshire should consider commercially available alternative PWSFs to tall cellular towers, which may include the use of the following:

(a) Lower antenna mounts which do not protrude as far above the surrounding tree canopies.

(b) Disguised PWSFs such as flagpoles, artificial tree poles, light poles, and traffic lights, which blend in with their surroundings.

(c) Camouflaged PWSFs mounted on existing structures and buildings.

(d) Custom designed PWSFs to minimize the visual impact of a PWSF on its surroundings.

(e) Other available technology.

IV. A PWSF map is necessary to allow for the orderly and efficient deployment of wireless communication services in New Hampshire, and so that local communities have adequate information with which to consider appropriate siting and options to mitigate the visual effects of PWSFs.

12-J:2 Definitions. In this chapter:

I. "Antenna" means the equipment from which wireless radio signals are sent and received by a PWSF.

II. "Average tree canopy height" means the average height found by inventorying the height above ground level of all trees over 20 feet in height for a radius of 150 feet.

III. "Camouflaged" means for a personal wireless service facility one that is disguised, hidden, part of an existing or proposed structure, or placed within an existing or proposed structure.

IV. "Carrier" means a person that provides personal wireless services.

V. "Director" means the director of the office of state planning.

VI. "Disguised" means, for a PWSF, designed to look like a structure which may commonly be found in the area surrounding a proposed PWSF such as, but not limited to, flagpoles, light poles, traffic lights, or artificial tree poles.

VII. "Equipment shelter" means an enclosed structure, cabinet, shed vault, or box near the base of a mount within which are housed equipment for PWSFs such as, batteries and electrical equipment.

VIII. "Height" means the height above ground level from the natural grade of a site to the highest point of a structure.

IX. "Mount" means the structure or surface upon which antennas are mounted and include roof-mounted, side-mounted, ground-mounted, and structure-mounted types.

X. "Municipality" means any city, town, unincorporated town, or unorganized place within the state.

XI. "Personal Wireless Service Facility" or "PWSF" or "facility" means any "PWSF" as defined in the federal Telecommunications Act of 1996, 47 U.S.C. section 332(c)(7)(C)(ii), including facilities used or to be used by a licensed provider of personal wireless services.

XII. "Personal Wireless Services" means any wireless telecommunications services, and commercial mobile services including cellular telephone services, personal communications services, and mobile and radio paging services as defined in the federal Telecommunications Act of 1996, 47 U.S.C. section 332 (c)(7)(C)(i).

XIII. "Radio frequency radiation" means the emissions from personal wireless service facilities.

12-J:3 Wireless Carriers Doing Business in this State. All wireless carriers or their appointed agents doing business, or seeking to do business, in this state shall:

I. Be allowed to construct new ground-mounted PWSFs, provided that these PWSFs comply with municipal regulations for maximum height or maximum allowed height above the average tree canopy height, subject to any exceptions allowed or variances granted by the municipality.

II. Comply with all applicable state and municipal land use regulations.

III. Comply with all federal, state and municipal statutes, rules and regulations, including federal radio frequency radiation emission regulations and the National Environmental Policy Act of 1969, as amended.

IV. Provide information at the time of application to construct an externally visible PWSF, or prior to construction if no approval is required, to the office of state planning, to the municipality in which the facility is to be constructed, and to each other municipality notified in accordance with RSA 12-J:7, as follows:

(a) A copy of their license from the Federal Communications Commission (FCC) proving that they are eligible to deploy their systems in this geographical area and that this deployment falls under the jurisdiction of the federal Telecommunications Act of 1996; or a copy of their contract with a person with such a license, and a copy of that license.

(b) Upon request, detailed maps showing all of the carrier's current externally visible tower and monopole PWSF locations in the state within a 20 mile radius, both active and inactive.

(c) Upon request, site descriptions for each of the above locations showing the antenna height and diameter, and showing all externally visible structures.

(d) Upon request, a description of why less visually intrusive alternatives for this facility were not proposed.

12-J:4 Payment of Costs. A wireless carrier seeking approval to deploy a wireless communication facility may be required to pay reasonable fees, including regional notification costs, imposed by the municipality in accordance with RSA 676:4, I(g).

12-J:5 Fall Zones. In order to provide protection from tower collapses and from falling debris including hardware, collapsing material, and ice, fall zones should be established, which ensure public safety at or near the base of tall antenna mounts or cellular towers. The radius of the fall zone should be equal to the height of the highest point of the facility including any antennae or appurtenances, unless a smaller radius is demonstrated to be appropriate based on the design of the specific structure. The radius of the fall zone should be the minimum distance from the base of any new ground mount PWSF to any property line, public road, habitable residential or business dwelling, or public recreational area, unless easements are obtained from all other property owners within the radius.

12-J:6 Personal Wireless Services Facilities Map. The director of the office of state planning shall develop a personal wireless service facilities map for the state. This map shall include all externally visible tower and monopole PWSF locations in the state, both active and inactive, for all carriers. This map shall also include for each of the above locations a site description as described in RSA 12-J:3, IV(c). Upon request of the director, any wireless carrier or its appointed agent doing business in this state shall provide a map of all of its existing externally visible tower and monopole PWSF locations in the state and a site description of each as described in RSA 12-J:3, IV(c).

12-J:7 Regional Notification.

I.(a) Any municipality or state authority or agency which receives an application to construct a PWSF which will be visible from any other New Hampshire municipality within a 20 mile radius shall provide written notification of such application and pending action to such other

municipality. Such municipalities within the 20 mile radius and their residents shall be allowed to comment at any public hearing related to the application. Regional notification and comments from other municipalities or their residents shall not be construed to imply legal standing to challenge any decision.

(b) This notification shall include sending a letter to the governing body of the municipality detailing the pending action on the application and shall also include publishing a notice in a newspaper customarily used for legal notices by such municipality, stating the specifics of the application, the pending action, and the date of the next public hearing on the application. Such notice shall be published not less than 7 days nor more than 21 days prior to the public hearing date.

II.(a) Any person, prior to constructing a new PWSF in any location where no approval is required but which will be visible from any other New Hampshire municipality within a 20 mile radius, shall provide written notification of such planned construction to such other municipality.

(b) This notification shall include sending a letter to the governing body of the municipality detailing the planned construction and shall also include publishing a notice in a newspaper customarily used for legal notices by such municipality within a 20 mile radius, outlining the planned construction.

12-J:8 Rulemaking. The director of the office of state planning shall adopt rules under RSA 541-A as necessary to implement this act and to provide sufficient information to municipalities, other state agencies, wireless companies doing business or seeking to do business in this state, and the public. The director, after holding a public hearing, may also adopt rules proposing a model ordinance for municipalities relative to the deployment of wireless communications facilities.

2 Effective Date. This act shall take effect 60 days after its passage.

LBAO
99-0161
2/19/99

HB 733 FISCAL NOTE

AN ACT relative to a state master plan for the deployment of wireless communication facilities.

FISCAL IMPACT:

The Department of Resources and Economic Development and the Public Utilities Commission are unable to determine the fiscal impact on state, county and local expenditures. There will be no fiscal impact on state, county and local revenue.

METHODOLOGY:

The Department states they do not have the technical expertise to perform the regulation and planning proposed by this bill, and are unable to determine the fiscal impact.

The Commission stated this bill has the potential to offset expenditures by governmental entities involved in a proceeding concerning the siting of wireless communications facilities. Accordingly, the level of expenditures that would have been made in the absence of this legislation would decrease. However, it is impossible to estimate the impact because there is no basis for predicting how many facilities will be built and where. In addition, in each particular case it is impossible to estimate the costs of participation in a proceeding.

Amendments

Sen. Below, Dist. 5
Rep. Belvin, Hills. 14
Rep. Bradley, Carr. 8
Rep. MacGillivray, Hills. 21
May 9, 2000
2000-4439s
04/10

Amendment to HB 733

Amend the title of the bill to read as follows:

AN ACT relative to a state master plan for the deployment of personal wireless service facilities and establishing a committee to study state wireless communications policy.

Amend the bill by replacing all after the enacting clause with the following:

1 New Chapter; Deployment of Personal Wireless Services Facilities. Amend RSA by inserting after chapter 21-I the following new chapter:

DEPLOYMENT OF PERSONAL WIRELESS
SERVICE FACILITIES

12-J:1 Goals; Purpose.

I. The federal Telecommunications Act of 1996 regulates the deployment of wireless services in the United States. Its purpose is to make these services available to the American people quickly and in a very competitive manner.

II. The visual effects of tall antenna mounts or towers may go well beyond the physical borders between municipalities, and should be addressed so as to require that all affected parties have the opportunity to be heard.

III. Carriers wishing to build personal wireless service facilities (PWSFs) in New Hampshire should consider commercially available alternative PWSFs to tall cellular towers, which may include the use of the following:

(a) Lower antenna mounts which do not protrude as far above the surrounding tree canopies.

(b) Disguised PWSFs such as flagpoles, artificial tree poles, light poles, and traffic lights, which blend in with their surroundings.

(c) Camouflaged PWSFs mounted on existing structures and buildings.

(d) Custom designed PWSFs to minimize the visual impact of a PWSF on its surroundings.

(e) Other available technology.

IV. A PWSF map is necessary to allow for the orderly and efficient deployment of wireless communication services in New Hampshire, and so that local communities have adequate information with which to consider appropriate siting and options to mitigate the visual effects of PWSFs.

V. Municipalities will benefit from state guidance regarding provisions to be considered in zoning ordinances relative to the deployment of wireless communications facilities, including one or more model ordinances.

VI. Nothing in this chapter shall be construed as altering any municipal zoning ordinance, and this chapter itself shall not be construed as a zoning ordinance.

12-J:2 Definitions. In this chapter:

I. "Antenna" means the equipment from which wireless radio signals are sent and received by a PWSF.

II. "Average tree canopy height" means the average height found by inventorying the height above ground level of all trees over a specified height within a specified radius.

III. "Camouflaged" means for a personal wireless service facility one that is disguised, hidden, part of an existing or proposed structure, or placed within an existing or proposed structure.

IV. "Carrier" means a person that provides personal wireless services.

V. "Director" means the director of the office of state planning.

VI. "Disguised" means, for a PWSF, designed to look like a structure which may commonly be found in the area surrounding a proposed PWSF such as, but not limited to, flagpoles, light poles, traffic lights, or artificial tree poles.

VII. "Equipment shelter" means an enclosed structure, cabinet, shed vault, or box near the base of a mount within which are housed equipment for PWSFs such as, batteries and electrical equipment.

VIII. "Height" means the height above ground level from the natural grade of a site to the highest point of a structure.

IX. "Mount" means the structure or surface upon which antennas are mounted and include roof-mounted, side-mounted, ground-mounted, and structure-mounted types.

X. "Municipality" means any city, town, unincorporated town, or unorganized place within the state.

XI. "Personal Wireless Service Facility" or "PWSF" or "facility" means any "PWSF" as defined in the federal Telecommunications Act of 1996, 47 U.S.C. section 332(c)(7)(C)(ii), including facilities used or to be used by a licensed provider of personal wireless services.

XII. "Personal Wireless Services" means any wireless telecommunications services, and commercial mobile services including cellular telephone services, personal communications services, and mobile and radio paging services as defined in the federal Telecommunications Act of 1996, 47 U.S.C. section 332 (c)(7)(C)(i).

XIII. "Radio frequency radiation" means the emissions from personal wireless service facilities.

12-J:3 Wireless Carriers Doing Business in this State. All wireless carriers or their appointed agents doing business, or seeking to do business, in this state shall:

I. Be allowed to construct new ground-mounted PWSFs, provided that these PWSFs comply with municipal regulations for maximum height or maximum allowed height above the average tree canopy height, subject to any exceptions, waivers, or variances allowed or granted by the municipality.

II. Comply with all applicable state and municipal land use regulations.

III. Comply with all federal, state and municipal statutes, rules and regulations, including federal radio frequency radiation emission regulations and the National Environmental Policy Act of 1969, as amended.

IV. Provide information at the time of application to construct an externally visible PWSF, or prior to construction if no approval is required, to the office of state planning, to the municipality in which the facility is to be constructed, and to each other municipality notified in accordance with RSA 12-J:7, as follows:

(a) A copy of their license from the Federal Communications Commission (FCC) proving that they are eligible to deploy their systems in this geographical area and that this deployment falls under the jurisdiction of the federal Telecommunications Act of 1996; or a copy of their contract with a person with such a license, and a copy of that license.

(b) Upon request, detailed maps showing all of the carrier's current externally visible tower and monopole PWSF locations in the state within a 20 mile radius of the proposed externally visible PWSF, both active and inactive.

(c) Upon request, site descriptions for each of the above locations showing the antenna height and diameter, and showing all externally visible structures.

(d) Upon request, a description of why less visually intrusive alternatives for this facility were not proposed.

12-J:4 Payment of Costs. A wireless carrier seeking approval to deploy a wireless communication facility may be required to pay reasonable fees, including regional notification costs, imposed by the municipality in accordance with RSA 676:4, I(g).

12-J:5 Fall Zones. In order to provide protection from tower collapses and from falling debris including hardware, collapsing material, and ice, fall zones should be established for public safety at or near the base of tall antenna mounts or cellular towers which should consider the design of the specific structure. Fall zones should not contain any property line, public road, habitable residential or business dwelling, or public recreational area, unless easements are obtained from all affected property owners.

12-J:6 Personal Wireless Services Facilities Map. The director of the office of state planning

shall develop a personal wireless service facilities map for the state. This map shall include all externally visible tower and monopole PWSF locations in the state, both active and inactive, for all carriers. This map shall also include for each of the above locations a site description as described in RSA 12-J:3, IV(c). Upon request of the director, any wireless carrier or its appointed agent doing business in this state shall provide a map of all of its existing externally visible tower and monopole PWSF locations in the state and a site description of each as described in RSA 12-J:3, IV(c).

12-J:7 Regional Notification.

I.(a) Any municipality or state authority or agency which receives an application to construct a PWSF which will be visible from any other New Hampshire municipality within a 20 mile radius shall provide written notification of such application and pending action to such other municipality within the 20 mile radius.

(b) This notification shall include sending a letter to the governing body of the municipality within the 20 mile radius detailing the pending action on the application and shall also include publishing a notice in a newspaper customarily used for legal notices by such municipality within the 20 mile radius, stating the specifics of the application, the pending action, and the date of the next public hearing on the application. Such notice shall be published not less than 7 days nor more than 21 days prior to the public hearing date.

II.(a) Any person, prior to constructing a new PWSF in any location where no approval is required but which will be visible from any other New Hampshire municipality within a 20 mile radius, shall provide written notification of such planned construction to such other municipality within the 20 mile radius.

(b) This notification shall include sending a letter to the governing body of the municipality within the 20 mile radius detailing the planned construction and shall also include publishing a notice in a newspaper customarily used for legal notices by such municipality within a 20 mile radius, outlining the planned construction.

III. Municipalities within the 20 mile radius described in paragraphs I or II and their residents shall be allowed to comment at any public hearing related to the application. Regional notification and comments from other municipalities or their residents shall not be construed to imply legal standing to challenge any decision.

12-J:8 Model Ordinances and Guidance. The director of the office of state planning shall develop one or more model municipal ordinances relative to the deployment of wireless communications facilities, after holding one or more public hearings and after soliciting input from interested parties. In addition, the state shall provide guidance to municipalities as to provisions that municipalities may wish to consider including in zoning ordinances.

12-J:9 Rulemaking.

I. The director of the office of state planning, after holding a public hearing, shall adopt rules under RSA 541-A as necessary to implement this act and to provide sufficient information to

municipalities, other state agencies, wireless companies doing business or seeking to do business in this state, and the public.

II. The director, after holding a public hearing, shall adopt rules under RSA 541-A developing one or more model ordinances relative to the deployment of personal wireless communication facilities.

2 Committee Established. There is established a committee to study state wireless communications policy.

3 Membership and Compensation.

I. The members of the study committee shall be as follows:

(a) At least 3 but not more than 5 members of the senate, appointed by the president of the senate.

(b) Five members of the house of representatives, appointed by the speaker of the house. The speaker of the house may also appoint up to 5 additional house members as alternates, if deemed appropriate.

II. Members of the committee shall receive mileage at the legislative rate when attending to the duties of the committee.

4 Duties. The committee shall review state policy regarding the use of public lands, right-of-ways, building, and other facilities for wireless communications, including commercial, public, and quasi-public purposes, and how such policy balances varied public interests, including promotion of telecommunications, alternatives to tall cellular towers, public safety, public and municipal participation in siting decisions, and preservation of aesthetic, landscape, and historic values.

5 Chairperson; Quorum. The members of the study committee shall elect a chairperson from among the members. The first meeting of the committee shall be called by the first-named senate member. Six members of the committee shall constitute a quorum.

6 Report. The study committee shall report its findings and any recommendations for proposed legislation to the senate president, the speaker of the house of representatives, the senate clerk, the house clerk, the governor, and the state library on or before December 1, 2000.

7 Effective Date. This act shall take effect 60 days after its passage.

2000-4439s

AMENDED ANALYSIS

This bill establishes a master plan for the orderly deployment of personal wireless service facilities in communities throughout the state.

The bill also establishes a committee to study the state wireless communications policy.

Energy and Economic Development
May 16, 2000
2000-4537s
10/04

Amendment to HB 733

Amend the title of the bill to read as follows:

AN ACT relative to a state master plan for the deployment of personal wireless service facilities and establishing a committee to study state wireless communications policy.

Amend the bill by replacing all after the enacting clause with the following:

1 New Chapter; Deployment of Personal Wireless Services Facilities. Amend RSA by inserting after chapter 21-I the following new chapter:

DEPLOYMENT OF PERSONAL WIRELESS
SERVICE FACILITIES

12-J:1 Goals; Purpose.

I. The federal Telecommunications Act of 1996 regulates the deployment of wireless services in the United States. Its purpose is to make these services available to the American people quickly and in a very competitive manner. Nothing in this chapter is intended to preempt the federal Telecommunications Act of 1996.

II. The visual effects of tall antenna mounts or towers may go well beyond the physical borders between municipalities, and should be addressed so as to require that all affected parties have the opportunity to be heard.

III. Carriers wishing to build personal wireless service facilities (PWSFs) in New Hampshire should consider commercially available alternative PWSFs to tall cellular towers, which may include the use of the following:

(a) Lower antenna mounts which do not protrude as far above the surrounding tree canopies.

(b) Disguised PWSFs such as flagpoles, artificial tree poles, light poles, and traffic lights, which blend in with their surroundings.

(c) Camouflaged PWSFs mounted on existing structures and buildings.

(d) Custom designed PWSFs to minimize the visual impact of a PWSF on its surroundings.

(e) Other available technology.

IV. A PWSF map is necessary to allow for the orderly and efficient deployment of wireless

communication services in New Hampshire, and so that local communities have adequate information with which to consider appropriate siting and options to mitigate the visual effects of PWSFs.

V. Municipalities will benefit from state guidance regarding provisions to be considered in zoning ordinances relative to the deployment of wireless communications facilities, including one or more model ordinances.

VI. Nothing in this chapter shall be construed as altering any municipal zoning ordinance, and this chapter itself shall not be construed as a zoning ordinance.

12-J:2 Definitions. In this chapter:

I. "Antenna" means the equipment from which wireless radio signals are sent and received by a PWSF.

II. "Average tree canopy height" means the average height found by inventorying the height above ground level of all trees over a specified height within a specified radius.

III. "Camouflaged" means for a personal wireless service facility one that is disguised, hidden, part of an existing or proposed structure, or placed within an existing or proposed structure.

IV. "Carrier" means a person that provides personal wireless services.

V. "Director" means the director of the office of state planning.

VI. "Disguised" means, for a PWSF, designed to look like a structure which may commonly be found in the area surrounding a proposed PWSF such as, but not limited to, flagpoles, light poles, traffic lights, or artificial tree poles.

VII. "Equipment shelter" means an enclosed structure, cabinet, shed vault, or box near the base of a mount within which are housed equipment for PWSFs such as, batteries and electrical equipment.

VIII. "Height" means the height above ground level from the natural grade of a site to the highest point of a structure.

IX. "Mount" means the structure or surface upon which antennas are mounted and include roof-mounted, side-mounted, ground-mounted, and structure-mounted types.

X. "Municipality" means any city, town, unincorporated town, or unorganized place within the state.

XI. "Personal Wireless Service Facility" or "PWSF" or "facility" means any "PWSF" as defined in the federal Telecommunications Act of 1996, 47 U.S.C. section 332(c)(7)(C)(ii), including facilities used or to be used by a licensed provider of personal wireless services.

XII. "Personal Wireless Services" means any wireless telecommunications services, and commercial mobile services including cellular telephone services, personal communications services, and mobile and radio paging services as defined in the federal Telecommunications Act of 1996, 47 U.S.C. section 332 (c)(7)(C)(i).

XIII. "Radio frequency radiation" means the emissions from personal wireless service

facilities.

12-J:3 Wireless Carriers Doing Business in this State. All wireless carriers or their appointed agents doing business, or seeking to do business, in this state shall:

I. Be allowed to construct new ground-mounted PWSFs, provided that these PWSFs comply with municipal regulations for maximum height or maximum allowed height above the average tree canopy height, subject to any exceptions, waivers, or variances allowed or granted by the municipality.

II. Comply with all applicable state and municipal land use regulations.

III. Comply with all federal, state and municipal statutes, rules and regulations, including federal radio frequency radiation emission regulations and the National Environmental Policy Act of 1969, as amended.

IV. Provide information at the time of application to construct an externally visible PWSF, or prior to construction if no approval is required, to the municipality in which the facility is to be constructed and to the office of state planning, as follows:

(a) A copy of their license from the Federal Communications Commission (FCC) proving that they are eligible to deploy their systems in this geographical area and that this deployment falls under the jurisdiction of the federal Telecommunications Act of 1996; or a copy of their contract with a person with such a license, and a copy of that license.

(b) Upon request, detailed maps showing all of the carrier's current externally visible tower and monopole PWSF locations in the state within a 20 mile radius of the proposed externally visible PWSF, both active and inactive.

(c) Upon request, site descriptions for each of the above locations showing the antenna height and diameter, and showing all externally visible structures.

(d) Upon request, a description of why less visually intrusive alternatives for this facility were not proposed.

12-J:4 Payment of Costs. A wireless carrier seeking approval to deploy a wireless communication facility may be required to pay reasonable fees, including regional notification costs, imposed by the municipality in accordance with RSA 676:4, I(g).

12-J:5 Fall Zones. Zoning ordinances may include provisions for fall zones for PWSFs to the extent necessary to protect public safety.

12-J:6 Personal Wireless Services Facilities Map. The director of the office of state planning shall develop a personal wireless service facilities map for the state. This map shall include all externally visible tower and monopole PWSF locations in the state, both active and inactive, for all carriers. This map shall also include for each of the above locations a site description as described in RSA 12-J:3, IV(c). Upon request of the director, any wireless carrier or its appointed agent doing business in this state shall provide a map of all of its existing externally visible tower and monopole PWSF locations in the state and a site description of each as described in RSA 12-J:3, IV(c).

12-J:7 Regional Notification.

I.(a) Any municipality or state authority or agency which receives an application to construct a PWSF which will be visible from any other New Hampshire municipality within a 20 mile radius shall provide written notification of such application and pending action to such other municipality within the 20 mile radius.

(b) This notification shall include sending a letter to the governing body of the municipality within the 20 mile radius detailing the pending action on the application and shall also include publishing a notice in a newspaper customarily used for legal notices by such municipality within the 20 mile radius, stating the specifics of the application, the pending action, and the date of the next public hearing on the application. Such notice shall be published not less than 7 days nor more than 21 days prior to the public hearing date.

II.(a) Any person, prior to constructing a new PWSF in any location where no approval is required but which will be visible from any other New Hampshire municipality within a 20 mile radius, shall provide written notification of such planned construction to such other municipality within the 20 mile radius.

(b) This notification shall include sending a letter to the governing body of the municipality within the 20 mile radius detailing the planned construction and shall also include publishing a notice in a newspaper customarily used for legal notices by such municipality within a 20 mile radius, outlining the planned construction.

III. Municipalities within the 20 mile radius described in paragraphs I or II and their residents shall be allowed to comment at any public hearing related to the application. Regional notification and comments from other municipalities or their residents shall not be construed to imply legal standing to challenge any decision.

12-J:8 Model Ordinances and Guidance. The director of the office of state planning shall develop a set of model municipal ordinances relative to the deployment of personal wireless communications facilities. Prior to development, the director shall hold one or more public hearings and solicit comments from interested parties. The office of state planning shall provide a copy of the set of model ordinances to any New Hampshire municipality that requests it.

12-J:9 Rulemaking. The director of the office of state planning, after holding a public hearing, shall adopt rules under RSA 541-A as necessary to implement this act and to provide sufficient information to municipalities, other state agencies, wireless companies doing business or seeking to do business in this state, and the public.

2 Committee Established. There is established a committee to study state wireless communications policy.

3 Membership and Compensation.

I. The members of the study committee shall be as follows:

(a) At least 3 but not more than 5 members of the senate, appointed by the president of

the senate.

(b) Five members of the house of representatives, appointed by the speaker of the house. The speaker of the house may also appoint up to 5 additional house members as alternates, if deemed appropriate.

II. Members of the committee shall receive mileage at the legislative rate when attending to the duties of the committee.

4 Duties. The committee shall review state policies regarding the use of state lands, state right-of-ways, state buildings, and other state facilities for wireless communications, including commercial, public, and quasi-public purposes, and how such policies balance varied public interests, including promotion of telecommunications, alternatives to tall cellular towers, public safety, public and municipal participation in siting decisions, and preservation of aesthetic, landscape, and historic values.

5 Chairperson; Quorum. The members of the study committee shall elect a chairperson from among the members. The first meeting of the committee shall be called by the first-named senate member. Six members of the committee shall constitute a quorum.

6 Report. The study committee shall report its findings and any recommendations for proposed legislation to the senate president, the speaker of the house of representatives, the senate clerk, the house clerk, the governor, and the state library on or before December 1, 2000.

7 Effective Date. This act shall take effect 60 days after its passage.

2000-4537s

AMENDED ANALYSIS

This bill establishes a master plan for the orderly deployment of personal wireless service facilities in communities throughout the state.

The bill also establishes a committee to study the state wireless communications policy.

Committee Minutes

Date: February 22, 2000
Time: 4:05 PM
Room: 105A-LOB

The Senate Committee on Energy Economic Development held a hearing on the following:

HB 733	relative to a state master plan for the deployment of personal wireless service facilities.

Members of Committee present:	Senator F. King Senator Below Senator Cohen Senator Hollingworth Senator Johnson Senator Fraser

---

The Chair, Senator Frederick W. King, Sr., opened the hearing.
Senator Frederick W. King, D. 1: I'm going to open the hearing on HB 733 and call upon Representative Belvin the Prime Sponsor of the legislation, to address the committee.

Representative Bill Belvin: Thank you Mr. Chairman. For the record I am Representative Bill Belvin, Hillsborough District 14, which is the town of Amherst. I am the Prime Sponsor of House Bill 733. And in the analysis of the bill it says the bill establishes a master plan for the orderly deployment of personal wireless service facilities in communities throughout the state. I thought that the House Science and Technology Committee in dealing with this, I'd just like to quote briefly from the blurb. And do have copies of the House blurb, as well as my remarks, which I will leave for the committee.

Attachment A-1 and A-2

The bill attempts to rationally deal with the increase of telecommunications towers and their visual effect on the New Hampshire landscape. It's my belief and I think the industry's belief that we are just at the beginning or the wireless revolution. That there is a great likely hood that there will be many more structures to which antennas will be placed for cell-phones for other forms of wireless communication. And that if we have some agreed upon

processes within the state that can benefit both the industries and the state's citizens.

The bill was amended and improved by the House Science and Technology Committee from its form of which I offered it. It is enabling in nature, so it is largely enabling. It is not filled with mandates for local... local communities. It came out of committee with a unanimous ought to pass, and was passed on the House floor by a voice vote without decent. I should compliment the committee, the House Science and Technology Committee for working with both the proponents of the legislation as well as representatives of the wireless telecommunications industry. It was my objective all along to achieve a win/win solution.

This outcome should accomplish three things. It should accelerate the deployment of wireless services through out the state, by establishing more certainty for both carriers and communities. And result in less litigation in the selecting and citing of personal wireless service facilities, PWSFs. By the way the telecommunications act of 1996 never mentions towers, there's some prestructures on which antennas are placed.

Consequently I am a cell-phone user. And this is designed to provide a more certain process. Others who may speak after me can speak of the experiences perhaps in Durham or in Amherst where extensive litigation made things more costly for the communities, for the carriers and in fact we should be able to do better than that.

The second thing that it would do of the three accomplishments, is lend assistance to local officials trying to develop coherent ordinances consistent with federal law. So often planning boards and ZBAs are citizens who are meeting without compensation in the evening after their work a day lives. And if the state can be of assistance to them in fashioning good ordinances, I think that would be useful. And finally this legislation should enhance the quality of life in New Hampshire through the preservations of viewscapes, and improve public safety.

I'll give you a quick review of the bill. It has a purpose section, which really speaks to the fact that there should be alternatives to 190-foot latticework towers or monopoles. And it goes into details about how those alternatives may be brought forward. There's a definition section that helps define terms in the bill as well as terms that could be used in local ordinances. It does specifically state that wireless carriers may erect PWSFs, personal wireless service facilities, but they must comply with local ordinances and state and local land use regulations. The courts in their decisions, both in the Virginia Beach decision and the Amherst decision on appeal support that position.

That reasonable cost for ordinance compliance may be payable by the carrier. That fall zones are recommended. Ice can come off of these structures as well as other pieces of the structure themselves. Or the structures may actually fold as happened in Quebec and elsewhere in this state during ice storms.

The Director of State Planning is to develop a PWSF map for the state. The concept here is, as more and more of these antenna mounts are required, and they may cluster in certain locations. Co-location could be encouraged, that would be a good thing. As well as if there are clusters of these the radiation levels, which usually are quite benign may start to grow. We just don't know. So now is the time at the beginning of this industry to be aware of these issues. It would also give the State Planning Department rule making authority and the state may, again in the enabling nature of this legislation, propose a model ordinance for adoption by the communities of the state.

There is a requirement for regional notification when a PWSF is visible for a radius of more than 20 miles from other communities, that these other communities be notified. These other communities will not have legal standing but they should be given the opportunity for comment wherever a PWSF is put up. The effective date is 60 days after passage, so there is no fiscal note as we believe the cost to be negligible.

The approaches recommended in this bill have proven to work in municipalities where they have been applied. That's certainly true in my town of Amherst. Recently just before Christmas, an application was made for an antenna mount, hearings were held with the planning commission. The presentation was in accordance with the ordinance adopted in the town of Amherst. After the holidays were over that permit was granted. In fact it is going to be a camouflaged tower in the form of a pine tree, as exists in Dublin New Hampshire as we speak.

My hope is to extend the successes of these kinds of thoughtful ordinances to the rest of the state. I would be happy Mr. Chairman to take questions. Although I note that there are many others here, and perhaps others could speak to some of these issues in addition to myself.

Senator Frederick W. King, D. 1: Questions? Senator Cohen?

Senator Burton J. Cohen, D. 24: On a previous somewhat similar bill, public safety State Police were concerned about communications with public safety operations, police out in remote areas. Do you believe that if this bill were to become law in position, that public safety would not in fact be jeopardized? The state would be... That this will enable a process whereby

municipalities and all different parties concerned could make sure that the State Police communications could in fact go ahead and continue and go ahead without a major lapse?

Representative Bill Belvin: Yes Senator Cohen I agree. Not only would the existing facilities, however controversial they may or may not be continue under this legislation, that's the topic of other bills perhaps. But because this offers the promise of a process that wins certainty and that it would be my belief that you could accelerate the placing of appropriate antennas particularly in the North Country. In places which are not typically immediately served where there are large population centers. Very often these antenna mounts and antennas arrays follow the interstate highways, that's where most of the original auto traffic was.

But as this industry matures, it is entirely possible that we will no longer use our voice communication over wire lines. We might end up in a much larger wireless world. Data may travel over wire lines or optical lines but voice may be entirely wireless. If there is a certainty of how ordinances can work than in fact I think it would accelerate the process of rules services coming in to effect, which would help the safety and welfare of the citizens of the state.

Senator Frederick W. King, D. 1: Senator Below?

Senator Clifton Below, D. 5: Thank you Mr. Chairman. A couple of concepts that I'm just... I'm wondering about. The average tree canopy height at the top of page 2 was found by determining the height of above ground level of all trees over 20 feet in height. It just occurs to me that if half the trees are 100 feet tall and half the trees are 50 feet tall the average tree canopy height is 75 feet. But the perceived tree canopy is actually 100 feet. Do you know where that definition came from?

Representative Bill Belvin: Thank you for the question Senator Below. I would like to defer that question to if I may to Andy Bridge, the resident of the town of Amherst who was instrumental in forming the Amherst ordinance, which we adopted over a year ago. And in fact this definition and others that appear in local ordinances was long discussed at public hearings in our town. Andy I'm going to stick it to you and hope that you can address this very reasonable question better than I.

Senator Clifton Below, D. 5: A further question, how exactly does this apply to places that don't have an ordinance? Does it assist them in some way? And does it apply to state owned property, which is now exempt from local ordinances?

Representative Bill Belvin: First on should a particular community have no ordinance? That is their choice. This legislation because it is enabling would suggest components that would be in a good ordinance, and we suggest to the State Planning Commission that they may prorogate a model ordinance. But at the present time any local authority can precede as they wish. This however is I think putting local planning boards and ZBAs and Zoning Boards of Adjustment on notice that you do have alternatives. Bur it would be up to the choice of the local community. In terms of how this would apply to state land, I'm going to defer that question to those who perhaps are more knowledgeable in that area. And if I may Representative Bradley, identify you who I believe is on the speaker list to discuss that aspect.

Senator Clifton Below, D. 5: Thank you.

Senator Frederick W. King, D. 1: Senator Fraser.

Senator Leo W. Fraser, Jr., D. 4: Thank you Mr. Chairman. Representative Belvin I'd like to go to page 2 of the bill, line 28, Wireless Carriers Doing Business in the State. Item number 1 starting on line 30, says be allowed to construct new ground-mounted PWSFs provided that these PWSFs comply with municipal regulations for maximum height, maximum allowed height above the average tree canopy height, subject to any exceptions allowed or variances granted by the municipality.

Could that section of HB 733, could a planning board of a community using that enabling legislation outlaw the construction or the erection of antennas?

Representative Bill Belvin: I think not. It is very clear the local planning boards given the zoning that exists in their town, commercial districts, rural districts, residential districts, historic districts, conservation easements and so forth, would define where within their districts where PWSFs could be located. In the case of the Amherst regulation that Mr. Andy Bridge, citizen of our town might ordinance might address. This simply gives guidance as to how far above the tree canopy that antenna mount might be... might exist. We know that the higher up they are typically, technically it is an easier task it is to them to then propagate their signal.

But in the Amherst case again, which again I think will prove instructive using this exact language in the ordinance, the Planning Board took advantage of their ability to offer a variance to raise the height antenna mount, and it resulted in the fact that another carrier will co-locate. As a result I believe it is some 20 feet or more, 26 thank you Andy, 26 feet above the canopy height. But we now have 2 carriers who are co-located, then saving the industry and the community an additional antenna mount. So no,

I don't think this would prove to be a barrier at all. In fact when thoughtfully applied as in the example you will hear about, worked well.

Senator Frederick W. King, D. 1: Thank you. Other questions? Thank you Representative.

Representative Bill Belvin: I'll leave my comments and the order with you.

Senator Frederick W. King, D. 1: Thank you. Representative Kaen, another Sponsor of the bill.

Representative Naida Kaen: For the record my name is Naida Kaen. I represent Strafford County District 7, which encompasses Lee and Madbury. I happen to live just a few miles from the town of Durham, which was involved in this issue as well.

My first exposure to this particular subject matter was as the Chair of the New Hampshire Counsel of Applied Technology and Innovation, where preliminary discussions were held prior to deciding that legislation might be appropriate. And I believe that Representative Belvin has presented this very well and your questioning has been excellent.

I will simply add that my own philosophical motivation in supporting all of this has to do with trying to both encourage the development of wireless communication and at the same time preserving the landscape in individual communities. Opportunity to develop their own regulations and an opportunity to tap the experience that others have had before them. Not to have to replicate the litigation that resulted in Durham or Amherst or to retrace those steps and have to reinvent the process all over again. If we can provide for a model, that should facilitate things. And that's my objective in all of this.

Senator Frederick W. King, D. 1: Thank you. Questions? Thank you very much. Mr. Boutin has to leave, and I would ask him to...

David Boutin: Mr. Chairman thank you for your courtesy. I just would like to tell the members of the Senate Committee that this might be a glued issue because the House Transportation Committee today voted 8-7 to ban cell-phones in cars. So we may be all here spinning our wheels for nothing.

For the record my name is David Boutin, I live in Manchester New Hampshire. I work for a firm known as SBA, we're on the NASDAQ. We develop wireless communication facilities for licensed carriers. We also

develop facilities for those companies that are in the wireless data transmission, which is a whole new field that is now becoming very important in the telecommunication industry. I am here because I have some... representing the industry I have some very serious concerns. And I've worked through the whole build out of one carrier for approximately 16 months here in New Hampshire. I was a zoning permitting manager.

In dealing with the legislation, and I will get to those articles in a moment, one of the things that first strikes me of serious concern is on page 1, line 10 and 11. It says, so as to require that all affected parties have the opportunity to be heard. That's common, those of you who are familiar with law there is a issue of standing. Who has standing? The legislation goes on to say that all communities within 20 miles of a site have to be notified. Well does that mean that the entire population of those entire 20 towns, have the right any one single individual to bring suit? I suspect that that's what this would be interpreted. I'm not sure that that's what we want. I can assure you that any town 20 miles away would never be able to see a wireless communication facility in a town for that distance.

It goes on in lines 11 and 12 to talk about alternative technology. And I can speak to the Amherst case because I was involved in it. The issue there was we were asked to prove the negative. There was no other alternative technology, there isn't today. No where in the country is there any other alternative technology. There was some attempts in some cities in some other parts of the country where they tried to do it on cable, doing wireless communication on cables, but it proved to be very unsuccessful because the transmission was poor, it was garbled. I don't believe that any of those experiments are still continuing. So we were asked to prove a negative to the community and to the state. Again line 22 talks about other technology and that is ditto in my remarks.

Now on page 2 the section called Wireless Carriers Doing Business in the State. Under the planning, zoning statutes stated in New Hampshire you have essentially 3 options. You can allow a use by permit, you can allow it by special exception, or you can allow it by... When I read the words in here subject to any exception or variance, we seem to be writing into law that there is no other way of getting... That if a community on its own such as Manchester, of which the planning board I sit on as Chairman. We took the time and the effort to develop our own plan and we allow some wireless communication facilities by right. This is saying you can't do that communities, you gotta only do it by special exception and by variance. I don't think that the state should be telling us that that's how we've got to conduct our affairs at the local level.

Line 33, applicable state land use regulations. I am totally puzzled by that. There are no uses in the state of New Hampshire that are governed by the state of New Hampshire other than those that might relate to utilities citing, like nuclear power plants, oil fire plants. The state of New Hampshire doesn't regulate where an industrial building goes, it doesn't regulate where a shopping center goes. So what are the land regulations that we have to abide by?

Senator Frederick W. King, D. 1: Wetlands.

David Boutin: That's true, that's true. You're correct on that Senator. But I'm talking about land use rather than impacting the land.

Senator Frederick W. King, D. 1: We also have legislation to state the goals what happens when we...(inaudible)

David Boutin: Ok, but by and large local zoning is what dictates what happens in a community, and that's my point Senator. And it makes me wonder because later on in the legislation on page 4, 12-J:8, line 17, Rulemaking. Is this where we're going to get the state land regulation, is where its going to happen? So this Senate Committee does not have the opportunity to see what they're proposing, that's going to be done through the process of ruling, which is generally devoid of any public participation. So I'm not sure what that... what that means. But it certainly is of serious concern to us.

Page 3, line 18, Fall Zones. There has never been a tower, a wireless communication facility tower that has fallen. It just hasn't happened. When they had the hurricane, is it Andrews I believe a couple years ago in Florida when mobile home parks were totally disintegrated, there was not one wireless communication tower that was knocked sown by that hurricane. It was one of the worst hurricanes we had. It doesn't happen. The lattice tower, the monopole towers, which are the ones that look like... you know they look like a spike going up. Those the ground its so far dug down, the hole with the concrete foundation that it would take a lot to knock that thing over. And certainly a hurricane won't do it and probably not a tornado. The lattice towers, those are the ones that look like the erector sets. Those are designed to crumple, if there was a failure and there hasn't been one.

The failure that the Representative was talking about in Quebec were power line failures. The big power transmission lines that you see running in swaths of you know almost 100 yards. Those big huge things, those are what failed, not wireless communication facilities. So what this does is it requires us to inefficiently use huge amounts of land. It really restricts you in where

you locate your facility, because what they're saying is if you build a tower 190 feet tall, you've gotta have 190 feet all the way around. Some towns do it even higher, they go 1 ½ or 2 times, so you might be required to have almost 400 feet in a circle around your facility. Because the notion is, there's a notion out there that got put out a few years ago by some attorneys who drafted model ordinances, and whipped up the public hysteria because it was a new way to create business.

Now, Reasonable Notification, also on page 3 line 34. You already have a process. Once a month our board in Manchester votes whether or not the new projects coming in the following month for hearing are projects of development of regional impact.

Excuse me. Sorry about that Mr. Chairman, I meant to put it on silent and I forgot to do that.

We have a process that we go through every month and we vote on it in terms of development and regional impact. So that process is already in place. That would be for instance and we've done this before where there was a project that was on the borderline and we notified the town of Bedford. We said there's a project happening, we want you to know about it and the Regional Planning Commissioner was notified. But what it doesn't do is require us to notify the town of Pittsfield for a project that's happening in Manchester. That's the difference.

Now Mr. Chairman, I had some articles distributed. The first article is from the Union Leader today. In essence what it says is that even without this legislation, even without it, it is so difficult now. It can take up to 3 to 4 months to get a tower approved now without putting this process in place. The towns that have zoning bylaws, wireless communication bylaws, what this article is saying is there's no incentive for the carriers to go beyond Concord. And we're going to make it more difficult for us to do business in this state?

The other article, the next article came out of the Boston Globe the northwest edition from Sunday. The conservation law foundation has approved to sign onto a bill that has been proposed in Massachusetts, to reduce the amount of regulation at the local level. Because they have made it so difficult to proceed that its impacting on the ability to assimilate technology throughout the state. You can read that article at your convenience.

The last article comes out of today's or Sunday's New York Times. There is a system called ITS, Intelligent Transportation System. The DOT Commissioner is looking at this right now. The concept is that you have a

transponder in your car. You would be able to go through a tollbooth, you'd be able to go through a McDonalds, you would be able to a lot of things. That essentially, that transponder would set up an account and you will be billed. So you can travel through the tollbooth without having to stop and pay. The opportunities there are endless. What the article goes on to say is that industry wants to piggyback on the cellular communications. So here, you know the technology of wireless voice communication is just the tip of the iceberg.

The one that's coming on hard and strong now is data transmission. Companies that we're doing work with is a company called Metrocom, which is deploying a wireless data communications system in the Greater Boston Area. They're going to want to come up to New Hampshire. They're going to want to come up to some of the other states. But if we pass a law like this we're going to be like Vermont. The carriers don't go to Vermont, they don't even touch the state. They're not interested because of that 250 and all the other regulations. I don't think we want to do that. We've got 10% of our labor force is in the high technology field and its growing every single day.

One of the advantages of wireless communication is the ability to telecommunicate, telecommute excuse me. Where you can work at home and instead of having to drive to Boston 5 days a week, maybe you only drive 2 days a week and you stay home the rest of the week and do your work. (TAPE CHANGE)

The state of Maine did what I think was the right way of doing it and which has not happened here in New Hampshire. They created a counsel made up of local planners, wireless communications providers, state officials and they developed this. It's a model ordinance and it is now being used in a large number of communities throughout the state of Maine. We've not been consulted in the development of this bill. I can assure you of that.

There will be an amendment coming. Someone will offer an amendment to this committee to do just that, to establish a study committee. Not a study committee, to authorize the Office of State Planning to develop a model ordinance. If that happens members of the Senate Committee, I hope that you will include a provision in there that there will be an opportunity for those of us who work in the wireless industry to have a seat at the table. Because what you're doing is tremendously affecting us. But more importantly what you're doing is tremendously affecting the opportunities for ourselves and our children to have access to technology. Thank you Mr. Chairman.

Senator Frederick W. King, D. 1: Questions? Senator Below?

Senator Clifton Below, D. 5: Thank you. Mr. Boutin I'm confused by a couple of points in your testimony. For example on page 3, line 18, Fall Zones. You objected to the provision on fall zones, but some towers are designed to crumple instead of to topple, and therefore would not need a radius as tall as the tower. Yet at line 22 specifically allows that unless a smaller radius is demonstrated to be appropriate based on the design of the specific structure. So if the structure is in fact designed to crumple instead of topple under severe weather conditions, which we seem to be seeing more and more of, then what's the problem?

David Boutin: I've been at this business for 3 years, and it will not work that way. Believe me. If they have a fall zone in the ordinance they'll enforce it.

Senator Clifton Below, D. 5: They will?

David Boutin: I'm just telling you from experience.

Senator Clifton Below, D. 5: Another question, Regional Notification, you objected to this provision saying we already have a regional impact notification. I served on a local planning board and know that that's a very subjective process. And often times when you grapple well does this have a regional impact or not? Certainly I think we never thought strictly in terms of visual factors. This simply seems to provide a objective basis to determine if there's regional impact, i.e. visible from other municipalities within a 20 mile radius. And yet your question suggested that towers are not visible 20 miles. A 180 foot tower certainly could be visible 20 miles away couldn't it?

David Boutin: Highly unlikely, because of topography.

Senator Clifton Below, D. 5: Well every day I drive I drive to and from Concord. Would you believe that there's a 180 foot tower that I can see well over 20 miles away?

David Boutin: If you say so Senator.

Senator Clifton Below, D. 5: Ok. I have one further question.

David Boutin: I fail to understand your question about there's a difference between the current statute, which is neighboring communities versus having to send a notice to a community 20 miles away and you still have the issue as to who has standing. So if you go to court...I mean who's... This whole system, this whole process doesn't allow for you know an

application procedure, it doesn't allow for time frames. All of that is set out in the planning statute now.

Senator Clifton Below, D. 5: That's precisely my next question. You objected that it wasn't clear who gets notification, yet at the end of line 37...

David Boutin: Which page is that?

Senator Clifton Below, D. 5: Page 3. It says, shall provide written notification of such application and pending action to such other municipality, page 4, line 1. It seems... Where's the ambiguity there? Isn't a municipality a town or a city? And isn't a 20 mile radius something that can be pretty definitively determined on a map?

David Boutin: Good point Senator. Then if you continue to read it says such municipalities within the 20 mile radius and their residents...

Senator Clifton Below, D. 5: Shall be allowed to comment at a public hearing. Then your next objection to this was that it seemed to imply that they have legal standing to challenge the decision. Yet the very next sentence specifically says this ability to comment shall not be construed to imply legal standing to challenge any decision. Doesn't that address the problem?

David Boutin: Well I think there's a conflict in the legislation as drafted, because in one section it says they have and then in another section it doesn't. So it's a good point Senator that you bring up.

Senator Clifton Below, D. 5: Thank you.

Senator Frederick W. King, D. 1: Other questions? Senator Fraser?

Senator Leo W. Fraser, Jr., D. 4: Thank you Mr. Chairman. Mr. Boutin I would like to go back to page 1 roman numeral III. Carriers wishing to build personal wireless service facilities in New Hampshire should consider commercially available alternative PWSFs. You suggested that there's no alternative. I think that was your testimony at this juncture.

David Boutin: That's correct.

Senator Leo W. Fraser, Jr., D. 4: I guess what my question would be this, would you support an idea that those people who may oppose the erection of a cell tower should be the ones who offer the alternative?

David Boutin: Yes.

Senator Leo W. Fraser, Jr., D. 4: Thank you.

Senator Frederick W. King, D. 1: Any other questions? Thank you very much. Mr. Connors?

Curt Connors: Did every one finish on the paper? Did we go out of turn in terms of who is for?

Senator Frederick W. King, D. 1: Excuse me?

Curt Connors: I just wanted to make sure. Did we get through everyone who was in favor or are we going back and forth?

Senator Frederick W. King, D. 1: No. Representative Bradley asked to testify after.

Curt Connors: I didn't know if Mr. Bridge or anyone.

Senator Frederick W. King, D. 1: The answer is no we have not. We have not gone through everyone who is in favor.

Curt Connors: Mr. Chairman, members of the committee my name is Curt Connors here on behalf of Nextel Communications. A wireless carrier in the New England area and nationally. I didn't bring my phone today so I don't think I'll have a ringing pocket. I'll try not to cover some of the areas that my predecessor went over. I may cover a little of the same ground. I apologize if I do.

In terms of the commercially available alternatives, there's a concern that this is a vague standard and a subjective standard. It's not clear when the carrier has met this. And again I think I would agree with the concept that currently in some areas due to topography, trees other obstacles a tower or something along those lines, that achieves that height is the only way that I am aware of is the only way to achieve the coverage. I guess there is a concern that litigation may erupt over this issue between the municipalities and the carriers, or with the rebutters who are subject to the new notification.

At this point carriers are already work with towns to try and come up with alternatives to towers. I can say that in the state of New Hampshire Nextel is co-located 80% of its sites. So for every 100 sites that we build 80 of them are on an existing structure. There are only 20 new structures per 100. I

think the industry as a whole has a good track record of trying to minimize the number of new structures. But again it is important to note that there will be times when a new structure will be the only way to achieve the level of coverage that's needed, particularly coverage in the North Country and other rural areas in this state. Across the United States there are 100,000 wireless 911 calls placed daily. And as my predecessor detailed we have all kinds of data and Internet functions that make this a valuable technology that all American's and every one in New Hampshire deserves to enjoy.

Jumping to the fall zones, my concern is that this is crafted, it is discriminatory against this one particular industry. AM radio stations, FM radio stations, TV stations and other large buildings are allowed to be erected without similar types of fall zone requirements. I mean they are all subject to catastrophic events that could effect them but only the wireless industry is singled out. I'm concerned about the discriminatory impact.

Also I think it was briefly addressed that by creating these fall zones, otherwise appropriate land, or at least deemed appropriate by a municipality may be automatically excluded. This would include municipal land that may not be big enough and towns would miss out on the revenue generated by permitting these facilities on their own land.

I think the rest I would probably skip over because I believe most of it was covered. And I would say that we are here in opposition to the bill as currently written. And as an alternative we would propose that the committee and the Senate pursue a model bylaw for... similar to Massachusetts and Maine and other states that would incorporate all the parties interests for the working relationships between all the parties. And give towns input into the process rather than a mandate for this. That's all I have.

Senator Frederick W. King, D. 1: Any questions? Senator Below?

Senator Clifton Below, D. 5: Thank you Mr. Chairman. Mr. Connors I'm a little confused about this objection to the reference to other technology on line 22, page 1. That seems to be under the contents of a statement of purpose, which is that carriers wishing to build PWSFs should consider commercially available alternatives, meaning the ones that are currently available not some hypothetical, theoretical thing. This is sort of a list of them and other available technology. Where does the practical objection to that reference come up? I'm just trying to find it in the body of the bill.

Curt Connors: From my perspective the devil is in the details, in terms of determining a commercially available alternative. At this point creating

artificial tree poles, traffic lights some of these may be appropriate, sometimes the tower may be so high that it would not blend in with the surrounding to have a 200 foot light pole in certain circumstances.

Senator Clifton Below, D. 5: Where in the bill does it suggest that you have to prove or disprove that there's other available technology to get a facility cited? Where is that stated?

Curt Connors: In my recollection the bill says that carriers should pursue or should consider commercially available alternatives. Should isn't shall, but it's also not may. I'm not sure what standard that creates and I'm not sure how it gets enforced. My concern is more its vagueness. I'm not certain how it would play out and that's really what I'm worried about.

Senator Clifton Below, D. 5: Ok.

Senator Frederick W. King, D. 1: To follow up on that, it really doesn't mandate you to take advantage of these alternatives, you just have to consider them.

Curt Connors: Right, but again it seems to be a challenge. A further concern I would have on it is that with the increased cost of these alternative trees and whatever else, a fundamental purpose of the act in addition to providing the coverage was to promote competition. That includes competition by small carriers. And I think these expensive technologies may have an impact on the ability of a smaller carrier to enter the market. You're heading back to the monopoly situation.

Senator Frederick W. King, D. 1: Other questions? Thank you very much. Mr. Andrew Eills?

Andrew Eills: Thank you Mr. Chairman, members of the committee. My name is Andrew Eills with Gallagher, Callahan and Gartrell here in Concord. Representing today Rural Cellular Corporation doing business as Cellular One. That's not the Cellular One that's in Massachusetts, its another Cellular One.

Just to give you a quick snapshot of Rural Cellular, it is a company that does business in 4 Counties in this state. As its name Cheshire County, Coos County, Grafton County and Sullivan County. And as its name suggests Rural Cellular is attempting to serve and build out in rural areas. I will keep my comments very brief. With respect to this bill I think Mr. Connors toughed on some key aspects on it.

We are opposed to the bill primarily because reviewing it we don't see how it assists in the development or build out of infrastructure in the state. Currently for instance, all communications providers or those who seek to build towers in the state have to comply with municipal laws and regulations. That's a given. Currently we have to comply with zoning requirements. That's a given. What I think and just to put on my lawyer hat for a minute, what I think the bill does do is it does create some uncertainty for both providers, municipalities, I know Mr. Callahan is left, and also citizens.

And that while Senator Below your comments with respect to the standing issue are correct, in terms of your reading of the law. I don't presume that the legislature enacts laws that are meaningless. I know it doesn't. And as a result if I'm in a municipality that for some reason, well-intentioned reason or some other reason hasn't received notification of a hearing concerning a wireless facility. I may have the right to argue that I should have received notice because it says shall in that section of the bill, Providing Regional Notification. And yet you correctly pointed out that the bill as well says this doesn't imply legal standing to challenge any decision.

I think there is some vagueness in that bill or at least there is some confusion in that section of the statute. Because whenever you're required to provide notice, you are required to provide notice. We can argue about whether you have standing or not in a court of law or any other form to argue that. So what that does I think is provide some type of impediment to build out of some of the infrastructure that New Hampshire wants, and that Rural Cellular wants to provide.

Senator Frederick W. King, D. 1: But don't a lot of our ordinances already require regional notice?

Andrew Ellis: They may or may not. Yes. I mean for instance...

Senator Frederick W. King, D. 1: So what is different if...

Andrew Ellis: This is...

Senator Frederick W. King, D. 1: In a planning group that I belong to, large developments are required to notify the rebutters. And that's even more complex. Here you just have to notify the municipality that you're going to do that. You send a registered letter and end the case.

Andrew Ellis: That's correct. But for instance for some reason, and I've been involved in those kind of projects as well and I can tell you that when

that kind of small minushia, small administrative act isn't followed it can lead to all kinds of problems.

Senator Frederick W. King, D. 1: It should.

Andrew Ellis: It may. But for instance though, if there weren't that notice provided then the bill says that it doesn't imply any legal standing for those who haven't received it. I think there's some... I think that the law, this section on the bill does create some confusion with respect to that type of notice.

Senator Frederick W. King, D. 1: Would you prefer municipalities to have standing if they don't receive the notice?

Andrew Ellis: No.

Senator Frederick W. King, D. 1: Thank you.

Andrew Ellis: In any event we oppose the bill. I'm happy to answer any questions. And we would support some kind of amendment with respect to creating a statewide model ordinance, if the committee deems that problem.

Senator Frederick W. King, D. 1: Thank you very much. Now I'll call on Representative Bradley.

Representative Bradley: Thank you Senator King and members of the committee. This bill as you can see I am a cosponsor of but I came before the House Science, Technology and Energy Committee. I believe we held 4 or 5 long work sessions on this bill. I don't recall seeing former House member Mr. Boutin at any one of those work sessions. And it would appear that he entirely forgot that the House existed. So I would ask you to take that into account when you listen to his testimony.

Let's go through some of the objections that have been raised. Other available technology is almost an add on to that list of other ways to try to minimize the impact of these cellular communications towers. If there are... If there is other available technology, it should be considered. It has to be commercially available. It's not a mandate.

Senator Frederick W. King, D. 1: May I ask my question?

Representative Bradley: Sure, go right ahead.

Senator Frederick W. King, D. 1: After the carrier has demonstrated they've done that then they go to step two and there's no...

Representative Bradley: Absolutely.

Senator Frederick W. King, D. 1: They don't need to adopt one of those other alternatives.

Representative Bradley: Absolutely. There's no mandate. We ask in the bill that if you approve it, that it should be considered.

Senator Clifton Below, D. 5: I have a question. This is in context of just the General Purpose Statement of the bill, I mean this probably would have to enact an ordinance that's reflected off of this. I mean there's... Even though it says this, if you're in a community that has no ordinance there is no entity you have to go to, to show that you have or haven't considered these other alternatives.

Representative Bradley: You're absolutely correct.

Senator Clifton Below, D. 5: Ok. Thank you.

Senator Frederick W. King, D. 1: Thank you, go ahead.

Representative Bradley: There was a question that was raised about public safety and state owned towers and whether this bill can restrict towers or whether towns can restrict towers. As I understand it, that is dealt with in the definition on page 2, line 22 through line 25 of the Personal Wireless Services and how it relates to the telecommunications act. It was never our intent, and we have a full understanding that the towns nor the state can deny reasonable opportunities for providers to actually install these. What this bill seeks to do is provide for orderly deployment.

I'm not going to sit here and say that this is a bill that's designed to encourage the full build out of towers all across the state. It's a bill that's designed for orderly deployment, knowing that what we heard was the towns we are a large disadvantage when it came to dealing with the telecommunications providers, not having model ordinances. Thankfully they've been developed now in towns such as Durham and Amherst, which is certainly helpful for other communities grappling with this.

Senator Frederick W. King, D. 1: Can towns limit? Just say there will be no towers?

Representative Bradley: No.

Senator Frederick W. King, D. 1: That's because of the federal legislation.

Representative Bradley: Yes. They can perhaps earmark zones for those towers, but they have to provide a reasonable opportunity for a tower to be installed.

Senator Frederick W. King, D. 1: Federal law requires it.

Representative Bradley: Yes. Absolutely. And this bill recognizes that reality. Mr. Boutin raised a point on line 33... 32 excuse me on page 2. Saying that he seemed to imply that a town that wanted to allow them in any location could not do that. I would dispute his interpretation on the bill. What it says is it would be subject to any possible exception, special exception, or variances. It does not deny a town to allow without any regulation.

Senator Clifton Below, D. 5: To clarify the intent of that, the example that you gave is that some regulations may by right just grant a right to do this in a particular zone, without giving any exception or variance. You're saying this is consistent with that concept. That if a municipal regulation doesn't exist, or it does exist and by right creates a right to build a type of tower without an exception or variance they can do it. But this also provides that if they need an exception or variance and can get it they can certainly do that.

Representative Bradley: Your interpretation is correct. The Fall Zone language I think Senator Below hit upon that very well. If a provider can demonstrate a smaller radius based on the design as appropriate, then the 1 to 1 ratio is not necessary. Is this discriminatory for the Nextel testimony? I guess I don't have an answer to that. I think safety is safety and the bottom line is this is enabling.

Moving along to the Regional Notification. We heard an awful lot of testimony and I'm sure that a lot of Senators did. I remember Senator Cohen's bill of a couple of years ago that dealt more with situations on state owned property about the fact about regional notification. I think Senator Below is right that they are potentially visible within that 20 mile radius. We worked long and hard with the representatives of the telecommunications industry and there were many of them that did come to the House hearings to craft this sentence on page 4, line 3. That does not give legal standing. That was certainly our intent that testimony and a point of view if you will was certainly appropriate, but if you were outside the community you were not entitled to legal standing.

Senator Frederick W. King, D. 1: That was the decision to the municipality in which the tower exists?

Representative Bradley: Yes. Absolutely. And the Regional Notification gets paid for, nobody's brought this up but in case you were curious the Payment of Cost section is on page 3, 15 through 17. That's a municipal ordinance that allows for those types of fees for processing, planning board, zoning board type of hearings, as I recall.

Senator Clifton Below, D. 5: And that's in accordance with an existing RSA.

Representative Bradley: It's an existing RSA. That's correct. But we referenced it for clarity.

Senator Clifton Below, D. 5: In terms of clarity, this whole process. One of the arguments against this has been well gees, towns can already make their own ordinances. But we do not have harmony in New Hampshire and local municipal ordinances are a function upon the statutory parameters for that. And the intent of this bill isn't to give the sort of parameters that give the guidance to communities to work within to create ordinances. So that they know that they can get payment of cost for this thing, what they have to do for notification and so on and so forth.

Representative Bradley: I couldn't have said it better myself, you stole my thunder. I think just in conclusion I'd say that the model ordinance is probably the most important part of the bill, so that towns that are at a disadvantage today will have the advantages of a model ordinance to help them when dealing with this thorny subject. I think the mapping is also appropriate because it will help collocation and wiser deployment. And the regional notification is some thing that is consistent with New Hampshire statutes on other planning and zoning issues.

Certainly the testimony that we heard from all the telecommunications providers that chose to participate with us and the 2 objections that you heard today, 2 of the 3 were from people that did not participate. Nextel was gracious enough to, I think have attended every meeting and given us a lot of input. I would say in conclusion that I think that what we've worked out was something that while the telecommunications folks might not be happy with, they will be able to live with. And that was certainly the impression that I got as we worked our way through this process. Day after day of long contentious, cantankerous hearings...
(TAPE CHANGE)

...re-referred it for study and spent a lot of time in September and October dealing with it.

Senator Frederick W. King, D. 1: Any questions? Thank you very much. Mr. Bridge?

Andy Bridge: Thank you Mr. Chairman. My name is Andy Bridge, I am a resident of Amherst New Hampshire. I appreciate the opportunity Sir to present some information to the committee. If I might Mr. Chairman, I do have a copy of an E-mail in which I believe Doctor Michael Carter I believe had sent to you Sir that I would like to give to the Clerk to make copies for the people who are not here, at the end of this. Thank you.

Attachment C

I had a full outline of exactly what I might want to talk about and I'm afraid it has all gone out of my head, given some of the presentations that have been made here. So I think if I might, I'll just wing it, and essentially explain to this committee where we came from, as far as the town of Amherst out of experience with this industry.

Our experience initially had to do with the company that Mr. Boutin represented, Omni Point Communications. They came into the town and indicated that they needed to build 5, 190 foot tall towers within a 7 mile stretch. Right down the center of our town. One of which was going to fall in the historic district of our town. They made it very clear at that point in time, and the records of the ZBA and Planning Board reflect this, that federal law mandated that tall towers, you know that towns couldn't zone towers out. Federal law also mandated that the best we could do it try to regulate the placement of those towers and essentially tall towers were necessary from a technical standpoint, a technical reason for these signals to propagate.

That all being said, most people when they heard that said well ok if we have to have them we might as well make some money off of them. We might as well try to locate them on town property where we can at least get some lease revenue from them, and we'll make the best of a bad situation. Luckily for the town of Amherst and personally I feel for the state of New Hampshire, my wife did not accept that. She actually went down through the library and through the Internet, obtained a copy of the federal law, the Telecommunications Act of 1996. I will also Mr. Chairman, be submitting these copies of this information for you.

Attachment D

In here is a word for word transcription of Section 704 of the Telecommunications Act, which deals with the rights of local towns. The section is titled preservation of local zoning authority. And in that section the word tower never appears. Betsy came home to me and said, "Where does this say in this law that we have to have 190 foot tall towers?"

It talks about the services having to be provided. The more that we looked into this, we began to realize that these signals don't come from the tower. These signals come from the antennas. The antennas are placed on towers. The antennas are placed on mounts. There are many different ways, commercially available ways to mount antennas other than on a 190 foot tall tower.

One of the questions that first came to my mind was well gee if the signal goes further, and I will admit that the higher the antenna is mounted the greater area your signal will cover. Just like as if a flashlight were held upside down above a table. The higher you put it up the larger the circle becomes of the area of coverage. Our whole point in Amherst has been, since the federal law does not use the word towers, and doesn't mandate you have to have towers but does state that you must allow the services to come in, lets make them build the sights lower.

In the town of Amherst we allow personal wireless service facilities in all districts of our town. So that they can come into any residential area and construct a personal wireless service facility. We realize that we are going to have more facilities but we are not going to have tall towers dotting our landscape. So I take great exception to some of the comments that Mr. Boutin made particularly in that area as far as there not being any commercially available alternatives.

In this packet there are references specifically to alternatives, commercially available alternatives with the company names, phone numbers, web sites you may access. You can see pictures of these sites. This is a brochure that we were asked to put together for Senator Smith, which he distributed to all 100 members of the United States Senate, which contains pictures and company information and brochures from companies that make alternatives to tall cellular towers, commercially available alternatives. They range from standard flagpoles, in which you can collocate 3 cellular companies in one facility. To the pine trees that were referenced, manufactured by Belmont in California, another company, which again allows for the location of the antennas. When grouped within pine trees as the Amherst ordinance will do on top of Walnut Hill, one of our most prestigious areas to live. This type essentially is going camouflaged.

There are many other ways in which to provide commercially available alternatives to tall towers. Some of these, and these are pictures taken from the state of New Hampshire. This is the Dublin pine tree out in Dublin on top of... up by... behind Beech Hill Hospital, which is disguised as an artificial pine tree. In the town of Bedford and the town of Raymond you have small what are called mast poles. These are essentially flagpoles with no flag on them, that use dual polarized antennas. Most of the antenna arrays that we see driving up here are secular arrays, the antennas are hung way out on these particular tower mounts. These tower mounts that use dual polarized antennas which are commercially available for all frequency ranges, they can be mounted directly to the pole. It reduces the profile of the pole. It looks like a pencil sticking up in the distance rather than a secular array going onto antennas. That one happened to be in Raymond. This one happens to be in Bedford. The town of Bedford is beginning to implement them because again they can collocate a couple different carriers on the same pole. But to me this is vastly different in character to this. The tall cellular tower mount that we're all used to seeing.

Why are these not used by the industry? They're not used by the industry primarily because they're more expensive. We will grant the industry that. We'll submit that they are more expensive. However we will also say that there's nothing in the federal telecommunications act that prohibits a town from requiring the deployment of these facilities, utilizing more expensive deployment technologies. Just as in the law itself as you will see when you read it, there's nothing that prohibits that carriers from passing those costs on to the consumer. So that if the residents of the town of Amherst feel that they need to protect their scenic beauty by requiring alternative... commercially available alternatives to tall towers, and those prove to be expensive the wireless carrier can bill us more. I mean that may end up being what happens.

But to sit there and state that commercially available alternatives don't exist, I mean I think just flies in the face of the reality. The reality of that situation, the lawsuit with Omnipoint was, Omnipoint lost. In the federal court in here you will find the specific case references for the town of Amherst versus Omnipoint along with a couple of other federal court cases. Which again specifically upholds the regular local community to make local land use decisions. And to require alternatives to tall towers even if they are more expensive. So the federal law has upheld the right of towns to make those types of decisions.

I think the problem that we have is that the companies themselves do not promote the alternatives. For a local planning board who are made up again mainly of volunteers, who volunteer their time. Their information comes

from the industry. That's the major source of information that they rely upon. As such what we feel what this bill does is it provides a more level playing field. This bill raises the points that there are alternatives to tall towers. Had the Board of Selectmen in the town of Amherst realized that there were alternatives that they could have requested and negotiated with the company rather than just 190 foot tall tower, you can rest assured we probably wouldn't have spent $100,000 in legal fees.

So what this bill does again is I think it enables local towns to be able to be aware that there are other alternatives and that a tall tower is a choice and not a legal or technical requirement for the delivery of these services. In the town of Amherst the Omnipoint situation took 2 years and over $100,000 of taxpayer's money to resolve. Omnipoint has no sites up in the town where they wanted them. They do have sites up on our water tower. Mr. Boutin raised a question about sites by right. They were granted during the lawsuit the right to place their antennas on our water tower. They have coverage in the town already from that particular site. Is it enough to cover the entire town? No. But the fact of the matter is that there are alternatives that can be used that are commercially available to these tower facilities. Unfortunately Omnipoint chose to battle it out in court with the town of Amherst and the town of Amherst won. Again it took over 2 years for that to happen.

This latest application under our new ordinance which essentially states that facilities may be built no more than 20 feet above the average tree canopy height. The question came up, where does this average tree canopy height come from? What is that number? What happens if the range of the heights of trees make it as such, that maybe the average will fall below the actual height of the surrounding trees? Well I would say to that the company has picked a pretty bad site for their facility. The company wouldn't pick that site. But in the town of Amherst there are literally hundreds, we catalogued in support of our ordinance hundreds of potential sites upon which these particular mounts could be placed 20 feet above the average tree canopy height. Now that's a lot different. That's over 100 feet shorter.

Senator Frederick W. King, D. 1: What happens if the tree grows?

Andy Bridge: Well the industry raised that question, and we raised the question of these bucket trucks go up to the top of these facilities at 80 feet in order to place the antennas up there, they can trim the trees. I mean there's nothing, trees can be trimmed. Trees can be trimmed. In the town of Amherst that question came up and US Cellular has agreed that they are going to build a facility structurally sound enough to be able to be raised so that the height can be raised if that does become an issue Sir.

So there are a number of different issues around this, but essentially the town of Amherst has made a decision, which seems to be good for itself to be able to regulate these facilities at 20 feet above the average tree canopy height.

Senator Frederick W. King, D. 1: So what happened in the final agreement of these? Would it be agreed that if they need to be extended in the future, that if these trees grow then they would be able to do that, its all part of the permit?

Andy Bridge: It would all be in part of the enabling part of this legislation. Again I don't see that this legislation requires the companies to do anything with the exception of providing a list of their sites to the state so they can develop a map of where the externally visible locations are. And it requires them to pay a reasonable cost, which they're probably going to be required to pay anyway from the local planning board.

What this industry objects to is the fact that word of these commercially available alternatives is going to get out to towns. Had the town of Amherst realized that in Dublin there was a pine tree pole, we probably would have requested a pine tree pole of Omnipoint. And again I think what we're trying to do here with this legislation is to level the playing field. So that cities and towns will have the opportunity to have these services delivered to their residents.

We have 2 cell phones in our house. We use them all the time. We're thinking about getting a third one for my daughter. This could be a win/win situation. In the town of Amherst we are essentially going to be covered now also by US Cellular and by Bell Atlantic even though they already had some coverage within the town. But they are both going to be collocated on this tree pole, and our citizens are going to get to enjoy those services while at the same time enjoying our scenic beauty. I think that's the purpose behind this bill.

The other question that Mr. Boutin did raise also was the fact that, and I think the... If there's one point of agreement with anybody between the industry and ourselves at this point is that we just in the early stages in the development of this technology. Just last Friday there was an article in the USA Today about wireless internet coming. Cell phones, local web go mobile. And wireless options open new door to E-world. We are truly only in the beginning phase of the deployment of the technology that we're seeing here. And that the requirement for cell sites is going to increase exponentially within the next 3 to 5 years. The main lobbying group for this industry the

CPIA estimates themselves at 450,000 new cell sites are going to be required nation wide within the next 3 to 5 years.

If we don't plan for the deployment of these technologies we are going to be overrun by visually inappropriate facilities. And the industry unfortunately likes to phrase this almost as an either or. Either you have tall towers, or you don't have cell coverage. And again I use the example of Amherst as the prime example that that is not the case. This is not an either or situation. We have not approached it as an either or. We're not trying to keep these companies out. We're approaching this as a win/win situation, where again people can enjoy the use of these wireless services while at the same time preserving their natural scenic beauty.

The other thing that I happened to hear this morning on WGIR radio for the first time was an advertisement called Go America dot Net. They are providing wireless Internet service for Internet devices like the palm readers and like your laptops where you can get a modem that will connect. This is the wave of where this technology is taking us. So I urge this panel to please consider supporting this bill. I believe that it is and enabling piece of legislation.

I don't believe that it in any way imposes onerous requirements on either the industry or the towns. But what it does do is at least it raises the question and allows for additional input to be made to local planning boards, where they will have more information upon which to base a decision that's going to have an impact upon their community. What they chose to do with it from that point on is up to them. If they chose to build tall towers, they can still do that. There's absolutely nothing in this legislation that prevents them from doing that. But what I think the industry is afraid of is it's afraid that more and more communities are going to be requesting lower sites, more camouflaged facilities now that the word is getting out that they are available. So thank you.

Senator Frederick W. King, D. 1: Well the fact is that in areas where I live where there are less customers than the market will control, if it chooses to be too overpowering with their regulation, they simply won't have the service available. At some point in time there has to be a negotiation obviously within a community like Amherst, who probably has more bargaining power than a town like Colebrook. So the market will control that ultimately.

Andy Bridge: Exactly.

Senator Frederick W. King, D. 1: You can't force a company to do business if they are going to lose money obviously.

Andy Bridge: Well the companies also do raise the question of the economic impact on them of having to build these less obtrusive, less visually intrusive sites. What I would suggest is that if that is a real argument, then again I would agree with Representative Bradley in the sense that the industry was well represented at the hearings last year. And this question came up but it was never really forcefully presented by the industry. If that is in fact the case, let them show us the financials on it. Let them show us exactly what that's going to do to their bottom line. Because I think that we are all going to be surprised at exactly how healthy most of those balance sheets are.

Its estimated by the Wall Street Journal alone that just revenue generation, and I grant you that's not profits, but revenue generation from cell sites averages between $50,000 and $250,000 for some of these carriers. Certainly there are huge costs involved here, I'm not arguing that point. But I think if they want to question the economics of it that they ought to be required to bring in documentation to show us exactly how that really affects them.

Senator Frederick W. King, D. 1: Well they are going to do that with the individual town, that's the point. This is something that allows towns to do this or choose not to do it.

Andy Bridge: Right.

Senator Frederick W. King, D. 1: If they chose not to do govern it they can put them anywhere they want to. That's the way I see it.

Andy Bridge: Mr. Boutin also raised the question about this Massachusetts bill. That is before the House right now, before the State Legislature in Massachusetts. I can understand Mr. Boutin's position on this being spokesman for the industry essentially. They are very much in favor of this bill which will actually strip local control over certain types of facilities in the state of Massachusetts. I would suggest that if Mr. Boutin is somehow proposing that this bill somehow be killed and something along that line be adopted, that we would need to take a real hard look at anything that's going to strip local authority. Which has been granted by the telecommunications act itself to local authorities, local towns to regulate the placement and structural modifications.

Senator Frederick W. King, D. 1: Thank you very much. Are there any questions? Thank you very much. There are two more people who wish to testify on this sheet, Mr. Vorthrop from the Office of State Planning is in support of the bill and does not wish to speak. I'll call on Mr. Woodbury.

Mark Woodbury: Thank you Mr. Chairman. I realize its getting quite late. I'll make my comments very brief. I have a handout here.

Attachment E

My name is Mark Woodbury. I'm a resident of Amherst. I'm a design engineer for Compaq computer and I have an interest in maintaining the scenic beauty of the state of New Hampshire and that's the only reason I'm here.

First of all I'd like to compliment the Science, Technology and Energy Committee for their work they did in the House to bring this bill forward. And especially Representative Belvin, I think he has done a lot of great work on this. I am very much in favor or it.

Andy Bridge has gone through a number of points that I had wanted to raise specific to the town of Amherst and the experience we had with them, so I am going to skip over some of those and really identify a few key points. Motivation points I think for part of what has been driving the resistance to this by the telecommunications industry. I think it's... There is motive, a financial motive for building tall towers beyond the simple cost variance of camouflaged versus a lattice tower of 190 feet. And what we've been seeing, ideas surveyed about 9 or 10 months ago now, I have not updated that. But in that last 2 years there were nearly 7,000 towers that were sold.

Providers by right of the telecommunications act of 1996 were placing towers in service and turning around and selling them to essentially real estate companies such as Crown Castle, American Tower. The average cost per tower when I went through the survey of those transactions that were public, was $433,000 per site over, across the country. So these towers typically cost approximately $125,000 to $180,000 depending on their location to build. There's a chance for them to recoup some short revenue at the expense of local communities. I believe this is why, in my personal opinion that this is why Omnipoint was aggressive in the town of Amherst and not listening to alternatives.

So I think what we need to do as a community is to provide these providers a different sort of motivation to provide, to guidance and provide us the protection that we need for the scenic beauty of the state of New Hampshire. And what we all thought we were providing and still is some guidance that the towns and providers can both work within. Kind of like putting rules on the table and saying, "Here's what we would like as a town. Here's examples of what we'd like to see." The towns have been educated. They understand the technical constraints that the providers are under. And the providers

understand the responsibility they have to the community and the desires of their potential clients and customers.

I believe that that's what this bill represents, and I strongly encourage that. In the handouts, and I won't go through it, but you will also find a number of pieces of information on alternatives. There are many technical alternatives. I'd like to just do a quick comparison to Andy Bridge's analogy of a flashlight pointing down. Actually the real technical problem is from the small handheld battery powered transceivers sending a signal back to the towers. It's a low powered signal going back to the tower itself of the antenna. The receiver is the place that has to be able to deal with that bad signal to noise ratio. This is a place that is very conducive to better technology. Typically digital receiver processors are used. Signal to noise ratio is a matter of number crunching and computers are getting quite fast and able to do a better job of receiving signal integrity.

So technology will allow other alternatives to come in, in terms of better signaling. Better efficiency in the hand held devices so there are absolutely alternatives. I'm surprised at the comment earlier today. If you have questions, I'd be happy to answer them.

Senator Frederick W. King, D. 1: Thank you very much.

Mark Woodbury: Thank you.

Senator Frederick W. King, D. 1: Mr. Novak?

Don Novak: Thank you Senators, I will be very brief. My name is Don Novak I live in Wilmot, and I support this legislation. The only suggestion I have for changing it, amending the legislation deals with the model ordinance provision, which right now is enabling legislation. I'd like to think that would be much better if it was mandated.

My reasoning for that is that I've been recently involved in the town of Wilmot for the Planning Board creating the ordinance in our town for wireless communications. And we went through an awful lot of work to create an ordinance, which I think it would have been much better if we had a model ordinance that was good structure to deal with to... as a starting point. Obviously every town is different. You can't have one ordinance for the entire state. That would never happen, that one ordinance would be applicable to every town. Every town has unique situations to deal with. I really think mandating that provision would be much better, we would be better served by mandating it.

Also another thing I think we should be doing in terms of this legislation is providing a time line for that to happen. Unless we provide a time line this is going to drag on forever. This industry is building up very quickly and I think we need to make sure if we do have a model ordinance, it's done in a time frame that's...

Senator Frederick W. King, D. 1: Are you suggesting the state should mandate the towns to adopt this?

Don Novak: What was that Senator?

Senator Frederick W. King, D. 1: Are you suggesting that the state should compel or mandate the communities in the state to adopt an ordinance?

Don Novak: Oh no, not at all. We should have a mandate for a model ordinance so the Office of State Planning is mandated to create that ordinance rather than being enabled. You know, right now the way it is, its left up to them to decide whether they want to or not, want to do it. I think we should require them to do it. And I agree with the industry and I agree with other people here. That if we had a panel of people representing the communities, the Office of State Planning, the industry as part of that enabling process, collaborative process to create that document, that model ordinance I think we would be better served.

Senator Clifton Below, D. 5: So you're saying you wouldn't be... You support the idea of some kind of collaborative stakeholder process to help develop a model ordinance?

Don Novak: Definitely.

Senator Clifton Below, D. 5: The Office of State Planning...

Don Novak: I think it's to the advantage of the industry to have a model ordinance. Right now they have a hodgepodge of ordinances out there. And the hodgepodge of ordinances that are out there, and if they have something of more uniformity and more consistency I think they would be...that they wouldn't be dealing with this... this you know everything... you know a different plan on how this industry should be built up. I think a lot of the towns are struggling with this issue.

I mean a lot of towns don't have ordinances right now. Were we are in the lake Sunapee Region, I think there's only one town in that whole entire area that has a wireless ordinance. And the fact is that it requires a lot of technology understanding to develop an ordinance like this. It's not

something you can do typically without an awful lot of technical background. I think the Office of State Planning not only should be able to provide a model of state ordinance, but also to provide some guidance to the towns as they develop their ordinance, some technical understanding, legal understanding.

Senator Frederick W. King, D. 1: Up where I live we don't like the state telling us how to do everything. You might like it were you are, but we don't like it. They are forced... they shall adopt rules under the rulemaking, administering rules act to implement this bill. So I think they will do some of that. They're required to do that under the mandate here.

Don Novak: Particularly the model ordinance I think is really an important provision in this bill.

Senator Frederick W. King, D. 1: I understand that.

Don Novak: I think it should be mandated.

Senator Frederick W. King, D. 1: Any other questions? Is there any one else who wishes to testify?

(TAPE CHANGE)

Dan Callahan: Good afternoon members of the committee. My name is Dan Callahan. I am a lawyer in Manchester and represent Nextel Communications. Timing is everything. I'm following up on the comments of the last gentleman.

Nextel would propose and you've heard from the Prime Sponsor, a Cosponsor and Representative Bradley as well as the proponents that the most critical provision of this proposed legislation is a model ordinance. Maine adopted that and did adopt a model ordinance. I'd be glad to share the only copy that I have. I'll make copies for the committee to review that.

Attachment F

But it was a cooperative effort, and we think that the way the bill is currently drafted, its rulemaking is what I've prepared and I suggest the committee look at it, that in RSA 4 we'd see, which is the creation of the Office of State Planning. Currently in 4-C:8 is where this legislature is mandated that the Office of State Planning do certain things. And we'd suggest that you mandate that they develop one or more forms of model ordinance. I've shared this with Mayra Carrol and I'll let her speak for herself at some point. I

know she had to leave today. That's where you ... Not that municipalities are required to adopt it but the state create one or more models that municipalities could use.

The concern that at least Nextel has with regard to the bill as it is currently drafted, and I do commend Representative Bradley that he did accept many of the changes that we had proposed in the bill. We weren't happy with the final result. And part of it was the dialogue that occurred today. Senator Below you had mentioned that you wanted to set up the parameters of what a zoning order to planning ordinance should look like, but this statute does not appear in the zoning sections of RSAs. It appears in the in RSA 12:J.

One of the changes which we asked to be in the purpose was that, and I'll read it because, and I'll share it with the committee, is that if you were to adopt this type of ordinance which does mandate a couple of things. Not a lot but it does and if the model ordinance is the most important thing that's what you should focus in on. But you also should state in the purpose what I think everybody has said today is this is not a zoning ordinance. House Bill 733 is not a zoning ordinance. There's nothing that the cities or towns have to do.

And that I think is important, and what we had suggested as language in the purpose was because the visual effects of tall tower mounts or towers. The purpose of this chapter to provide guidance to municipalities as to the provisions, that municipalities may consider in including in their zoning ordinances. This chapter shall not be construed so as to alter any existing zoning ordinance adopted by a municipality. And this chapter is not a zoning ordinance.

I think that is critical if you're going to use 733 beyond mandating that a model ordinance be adopted, because you will develop litigation over the meaning of whether or not this preempts local zoning. I don't think you want to do that from what everybody's testified you don't want to preempt it. You want to encourage municipalities to do it. There are municipalities that don't want zoning and want whatever you want to occur in their towns. That is their right the state has not mandated that any city or town adopt zoning. And I don't think...That is our concern is that there is a little bit of lack of clarity in that. With that I will conclude and answer any questions, but I will provide copies.

Senator Frederick W. King, D. 1: Thank you. Questions?

Senator Clifton Below, D. 5: Thank you. So Mr. Callahan you would agree with Mr. Novak that you would support the idea of a collaborative process

that stakeholders help develop a model ordinance or multiple forms of ordinance?

Dan Callahan: Absolutely. In fact the language that I drafted is if the model ordinances, which is what... If the model ordinances is what... And everybody who has testified in favor of the bill has said the model ordinance section is the most important part. If that is the most important part and the rest of it is guidance, let's say that we're going to give guidance, let the Office of State Planning open up the docket on that. What happened in the state of Maine just so you know, and one of the persons that I had asked to come but was unavailable to come was Eric Carson who was with the Office of State Planning in the state of Maine.

But the people who participated in developing this model ordinance with questions and answers about what can be considered in the state of Maine. And it says in fact a guide for municipalities and applicants seeking to plan for and cite wireless telecommunications facilities in the state of Maine. The parties who appeared who participated in this were Judith Bernstein from the town of Kennybunk, Roger Cole from the town of Rundle, William Ferdanand from the Office of State Planning, Barry Hoffkan from Vanguard Cellular, Charles Jackson from Maine Municipal, David Litel from Pierce Attwood. The last 4 people I mentioned were all lawyers and obviously there may be a lawyer protection act in here too. Kathy Silverman from the Associated Telecommunications Consultants, Eric Carson from the Office of State Planning, Doug Edwards from Maine wireless, Mark Gartley from US Cellular, Blaine Hopkins from ATC, John Katasafaricas from Maine Municipal Association, and Rick Sealy from the Greater Portland Counsel of Governors.

I understand that the town of Gray Maine recently adopted the model ordinance and is working well with the industry. So I think if that is the most important aspect, because we are at the beginning and not at the end of this technology. And if New Hampshire is the per capita high tech job capital in this country this is an important consideration that the Office of State Planning and the legislature ought to consider. I think that we would recommend... would whole-heartedly work with the committee on that.

Again my concern is looking at it, as a lawyer there are some questions about the implication. I mean if we could bottle what was testified to today and take that to everybody and say 733 except for the model ordinance section is guides. The model ordinance section is a mandate to the Office of State Planning to start this process. I think a lot of our fears are laid with regard to what 733 means. Up until now that has been a concern. I do not when I say that want to belittle what the House committee did. They worked with me

and other folks that are sitting behind here on it. We didn't reach final agreement but some of our comments were adopted, especially in the definitional section. We appreciated that.

I do know that I was with Representative Bradley because I could share his lament of how the Red Sox were doing in the playoffs. He did promise that they would beat the Yanks but maybe it will be this year.

Senator Frederick W. King, D. 1: You'll understand that as you know already that this becomes part of the legislature, this hearing becomes part of the legislative record, so that testimony will be recorded and available.

Dan Callahan: Understood. But I think if we have the opportunity and if there is some consideration about using the model ordinance and offering guidance I think if that... And that's what I heard from the proponents. As I said that we can work to achieve a bill that addresses those issues and really allows the municipalities the opportunity to participate in the process. I think I would suspect...

Senator Frederick W. King, D. 1: The administrative rules process allows that to take place.

Dan Callahan: Yes.

Senator Frederick W. King, D. 1: Any other questions?

Senator Clifton Below, D. 5: If you could get us a copy of that Maine...

Dan Callahan: I will be glad to do that, this is my only copy but I will have copies made for the committee. We'd be glad to serve either with the subcommittee or further committee hearings here.

Senator Frederick W. King, D. 1: Thank you. Mrs. Novak and Mrs. Bridge wish to note that they are in support of the legislation, did not wish to testify...

Patricia Novak: I had not planned to but I would just like to make a comment on something that Mr. Callahan said.

Senator Frederick W. King, D. 1: Step forward please.

Patricia Novak: I'm Patricia Novak from Wilmot. I have witnessed my husband working on Wilmot's ordinance very extensively. He happens to

have a technical background so have some of the other people working with him. It wasn't as great a task as it probably will be for many other towns.

Certainly the model ordinance is important but I hope I'm understanding correctly what Mr. Callahan is saying. I support this bill very strongly and in no way if he is asking to have a model ordinance written and the rest of the bill be called guidance and not be a piece of legislation, than I would oppose what he is suggesting. Because a model ordinance would not take care of having the state develop a personal wireless services facilities map. A model ordinance for towns to adopt would not provide for regional notification of towns. There is just too much quality enabling legislation here in this bill. I would be opposed to just doing the ordinance and calling the rest of the bill guidance.

Senator Frederick W. King, D. 1: I don't think that's what Mr. Callahan was referring.

Patricia Novak: Well could he clarify that for us?

Senator Frederick W. King, D. 1: Well he doesn't need to we'll be making that decision.

Patricia Novak: Oh, ok.

Senator Frederick W. King, D. 1: But that wasn't the way we read it. I think what I thought he was saying was that, that model ordinance to the court. So the committee will discuss that. But I think we heard loud and clear how he'd feel about this. Any questions? Ok, thank you.

Patricia Novak: Thank you.

Senator Frederick W. King, D. 1: Thank you very much. Mrs. Bridge did you wish to comment?

Betsie Bridge: I don't have a lot to say. I have a couple questions. I'm just a little confused that all of a sudden at this point in time the industry has decided that a model ordinance is a good idea. That's very surprising to me, it seems like they didn't think it was such a good idea.

Senator Frederick W. King, D. 1: Do you think it's a good idea?

Betsie Bridge: Yes I do. I do think it's a good idea. I don't think that Maine ordinance is necessarily what we would want in New Hampshire. But I do think it's a good idea. In fact the Office of State Planning a few years

ago, I would say maybe 3 years ago or so hired a consultant who was dreaded by the industry by the name of Ted Cryness, to come and talk to them about developing model ordinances. So some of this work has already been done.

He's not liked by the industry because he takes the view that this is a planning issue and not a technical issue, which is basically what the Amherst and Durham ordinances say. He says that the industry is composed of engineers that are can do people. You decide what you want your town to look like, right up an ordinance that allows for facilities and then they will work to your specifications. That's basically what we have in the town of Amherst and the town of Durham. I'd like to see that throughout the whole state.

Senator Frederick W. King, D. 1: Understand throughout the whole state we're going to do in our towns what we want to do. That's what I like about this bill. This is a local control issue and that's one thing I like about this bill. We don't want people from Amherst telling us in Colebrook how to do our communications towers, just like you don't want us to tell you. So that's what I understand this bill. This really is a model ordinance the way I see it, which is a time line for communities like mine who need to address this issue and haven't. This starts that process very nicely. I believe that's the start of it.

Betsie Bridge: My only other comment is going back to the original intent of this bill, but that for many towns, especially small towns all their information about writing ordinances and how this system should be built up was coming from the industry. There was no place for them to go for any other information. I feel like this bill will provide that to them.

Senator Frederick W. King, D. 1: Thank you. Is there any one who would like to speak again for the first time? If not then I will ask Representative Belvin the Sponsor of the bill to speak briefly for the second time.

Representative Bill Belvin: Thank you very much for this courtesy.

Senator Frederick W. King, D. 1: Bear in mind that I have a 3 hour drive.

Representative Bill Belvin: I do not wish to set an example for others to speak a second time either. Mr. Bridge this is incremental information, new information I believe. In Mr. Bridge's testimony he offered an E-mail from Michael Carter. I would just like to emphasize that Michael Carter is Professor Michael Carter of the Department of Electrical Engineering at the University of New Hampshire. He brings deep technical insight to the issues associated with the entire system. He has stressed in testimony to the House

and to me that these are systems, and that the wattages of the handheld telephones are very important and can say very much about what the nature of an antenna array might be.

As Mrs. Bridge had indicated, you tell the engineers what you want and within the system of the antennas and the receivers and the total complexity of it, a technical solution can be forth coming. I think that you will find Professor Carter to be both knowledgeable at the technical level, but he's also from his years of instructing students able to reduce the technology to an understandable level for us policy makers to deal with. Should your committee have any concerns about what the technology is or is not or have doubts raised, I highly recommend you contact a member of our faculty at UNH, Professor Michael Carter.

My other final observation is on the sudden emergence of the importance of a model ordinance. What is most important in my mind as the original Sponsor of this legislation, is that the state of New Hampshire begin the process of having reasonable locally driven enabling legislation in place. There is world enough and time in the next session or succeeding sessions for deep discussions on model ordinances. Thank you.

Senator Frederick W. King, D. 1: Is there any one else who wishes to testify on House Bill 733? Thank you all for your patience. Good afternoon for all of you, and drive careful on the ride home.

Hearing closed at 5:45 PM

Respectfully submitted,
Jillian Nina Mason,
Verbatim Transcriber

Attachment A-1

SCIENCE, TECHNOLOGY AND ENERGY

HB 733, relative to a state master plan for the deployment of personal wireless service facilities. OUGHT TO PASS WITH AMENDMENT

Rep. Jeb E. Bradley for Science, Technology and Energy: The bill, as amended, attempts to rationally deal with the increase of telecommunication towers and their visual effect on New Hampshire landscape. The bill balances aesthetic concerns with the need for orderly development of telecommunications sites. The bill allows the Office of State Planning to develop a model zoning ordinance which local planning and zoning boards may use if they choose to adopt local zoning ordinances. The committee believes development of such a model ordinance will give invaluable assistance to local officials trying to develop coherent ordinances consistent with federal law. Such a model ordinance is strictly advisory in nature and does not establish or supersede any existing local ordinances. The bill further allows for regional notification to other New Hampshire municipalities and their residents when a tower would be visible within a radius of 20 miles. Residents from other municipalities would be allowed to comment on a particular tower installation but would not be given legal standing under the proposed bill. The bill also instructs the Office of State Planning to create a statewide map of visible tower facilities in order to encourage orderly deployment of facilities as well as opportunities for co-location of facilities. There is no fiscal note attached to this bill, and the committee believes any fiscal impact will be very, very limited. The committee worked extensively with the bill's proponents as well as representatives of the wireless telecommunications industry. The committee believes that this bill will assist local communities that are struggling to understand both their opportunities and responsibilities under federal law with regard to the siting of telecommunication towers. This bill does not affect towers owned by amateur radio operators. Vote 18-0.

Attachment A-2

HB-733

Senate Energy and Economic Development Committee

3:20 PM, February 22, 2000 Room 105A, State House

Representative William Belvin, Hillsborough District 14 (Amherst)

Analysis: **The Bill Establishes a Master Plan for the Orderly Deployment of Personal Wireless Service Facilities in Communities throughout the State.**

House Science and Technology Blurb: "The bill...attempts to rationally deal with the increase of telecommunication towers and their visual effect on the NH landscape"

The bill was amended and improved by House Science and Technology, is enabling in nature, and came out of committee with a unanimous OTP, and was passed on the House floor by a voice vote without dissent. The committee worked with both proponents and representatives of the wireless telecommunications industry to achieve a win/win outcome.

That outcome should:

- accelerate the deployment of wireless services throughout the state, by establishing more certainty for both carriers and communities, and less litigation in the selecting and siting of Personal Wireless Service Facilities,
- lend assistance to local officials trying to develop coherent ordinances consistent with Federal Law, and
- enhance the quality of life in NH through preservation of view scapes, and improved public safety.

Bill Review:

- Purpose: there are alternatives to 190' lattice work cell towers, that comply with the Federal Telecommunications Act of 1996, and subsequent Federal Court decisions,
- Definitions section for terms in the bill and local ordinances,
- Wireless carriers may erect PWSF but must comply with local ordinances, and state and local land use regulations,
- Reasonable costs for ordinance compliance may be payable by the carrier,
- Fall zones are recommended,
- The Director of State Planning is to develop a PWSF map for the state, and has rule making authority and may propose a model ordinance, and
- regional notification is required to communities where a PWSF is visible within a 20 mile radius of it's proposed location,
- effective date 60 days after passage, and no fiscal note as costs are negligible.

The approaches recommended in this bill have been proven to work in municipalities where they have been applied. My hope is to extend these successes to the rest of the state.

Much of NH is a no-man's-land in digital cell phone revolution

Coverage for cutting-edge services doesn't extend very far north

CONCORD (AP) — For people with a hankering for the latest high-tech toys that use digital cellular communication, New Hampshire can be a barren wasteland.

If using palm computers to check e-mail or receiving Internet messages through cell phones is a must, living in some of the more rural parts of the state could — for now — be a must not.

In New Hampshire, the companies that offer the most cutting-edge digital services haven't extended their coverage much farther north than Canterbury, leaving much of the state out of the wireless loop.

One reason is the cost of enlarging digital networks. At a cost of about $400,000 per cellular tower, expanding by even a few miles requires a huge investment.

Another reason, according to Sprint PCS spokesman Rick Pearl, is that each community has its own rules and regulations to be complied with, making it a challenge to get all the necessary zoning approvals.

"It's like a big jigsaw puzzle," he said. "You have to work with each city and town to get this thing to mesh up so you don't have holes. We're building as fast as we can."

But cell phone use is increasing. Last year the number of users increased by 25 percent to 31 percent of the country's population, or more than 77 million people, said Mark Lowenstein, a wireless analyst with The Yankee Group in Boston.

That pattern holds true in New Hampshire, where more than 300,000 people, many of them southern-tier professionals, have cell phones, he said.

More customers and increased competition among companies have helped cut prices by about 50 percent during the last four years, and the trend should continue, Lowenstein said.

But the best digital services and cheapest rates still center around large metropolitan areas such as Boston, New York and Los Angeles.

In so-called secondary markets such as New Hampshire, the companies have spent their money on cities, including Nashua, Manchester and Concord. And the rest of the state? Someday.

The four major cell phone companies that serve New Hampshire — U.S. Cellular, AT&T Wireless, Bell Atlantic Mobile and Sprint PCS — are expanding, but progress is slow, and expensive.

"The logic is that you cover the high-population areas first and then the major roadways," said Pearl. "Once you have those covered, you fill in the surrounding areas to blanket the rest of the area."

The exception is U.S. Cellular, which has established an analog network throughout the state and a digital network everywhere but Rockingham and Strafford counties.

But their digital network is limited. Technophiles can use sophisticated cell phones to receive e-mail messages, but can't yet surf text-based Web pages.

Union Leader 2/22/00

Attachment B

Sunday Globe 2/20 Northwest Weekly subsidy



ARTWORK COURTESY OF RIVER MEADOW BROOK ASSOCIATION

Detail from "Fisher with Birch," a 1998 work by naturalist Thomas Wilson.

Proposal to ease antenna sitings

Bill draws protests over loss of control

By Caroline Louise Cole
GLOBE CORRESPONDENT

To encourage the use of existing buildings and towers for new cellular telephone antennas, the Massachusetts Municipal Association is proposing a sweeping change in the state's onerous zoning code that would leave abutting property owners out of most siting decisions.

"The intention is to streamline the process so that the public saves their gunpowder for the really big disputes," Beverly Mayor William Scanlon said of the six-page bill he helped draft for the association, a lobbying group on Beacon Hill for all but three communities in the state.

The group's proposed amendment to Chapter 40A of the state's General Laws sets up a two-tiered system that defines antenna installations as either "major" or "minor." A major facility would be an antenna attached to a new tower or monopole. Minor facilities would be those "installed on or in or attached on or to a building or existing wireless telecommunications tower or pole or utility transmission tower, overhead cable, smokestack, steeple, water tank, or billboard."

Installations defined as minor would be exempt from local zoning permitting processes, Scanlon noted, and wireless companies would be required only to secure a local building permit.

CELLULAR ANTENNAS, Page 9

Web to build interest, raise money

...property. Today, any man who pro... screens users see when they begin an In... In the Masons' case, the page includes

Bill would ease siting limits

■ CELLULAR ANTENNAS

Continued from Page 1

Companies would be encouraged to camouflage all antenna structures to reduce "their visual impact," by painting them to blend with their surroundings or by hiding them inside a building or church steeple, Scanlon said.

The bill would also limit the height of minor antenna structures to 10 feet taller than the existing base structure.

But two weeks before the bill is scheduled to be presented to the state Legislature, the proposal is running into resistance from local officials and legislators.

Since releasing a draft of the legislation three weeks ago, the municipal association has been inundated with telephone calls protesting that the changes go too far, according to Thatcher Kezer, the association's legislative analyst.

On Thursday, a coalition of citizens and legislators from across the state held a rally on the steps of the State House to focus attention on what they believe are the bill's failings.

Among those opponents is Diana Warren, the chairwoman of Wayland's telecommunications committee.

"What this regulation would do is gut the wireless communications siting bylaws dozens of other communities across the state have crafted in the last several years to protect their citizens and their property values," Warren said.

Warren said she is outraged that the proposal would eliminate, in most cases, the local setback requirements that keep antenna structures away from residences and schools. Sudbury requires a 1,000-foot setback from schools, and Concord requires 500 feet, for instance.

And, Warren notes, the public would lose the opportunity to air their opinions at a local public hearing or take a local zoning decision to court.

Under the zoning process in most communities, wireless companies seeking to install antennas for their mobile telephone networks must notify neighbors of their construction plans.

In Concord, for example, companies must gain a special permit from the local Zoning Board of Appeals and, as a part of that process, abutting property owners are notified and a public hearing is held, according to Marcia Rasmussen, the town planner.

Once the local siting determination is made, the public has the right to appeal the decision to the state Department of Telecommunications and Energy and then to the state court system.

Kezer said Mass. Municipal officials want "to cut the DTE and the state court system out of the siting process" to reduce litigation costs for the industry and for municipalities.

While those aggrieved by any decision of a building inspector could still appeal to their zoning board and eventually to state courts, Kezer said, the proposed bill greatly reduces the grounds for legal action.

"As demand for wireless phone services has increased, we have seen exponential growth in the number of court cases which pitted residents against their towns and the cellular telephone providers," he said. "I don't think anyone was happy with the outcomes we were seeing from either the DTE or the courts."

John Pike, an attorney for the Conservation Law Foundation, which helped write the legislation, said he believes that in the 10 municipal appeals that have come before the Department of Telecommunications and Energy, the agency has sided with the industry.

Kezer said Mass. Municipal's proposal is the result of two years of "cooperative negotiations" with the industry to work out a better siting process. He pointed out that the Boston-based Conservation Law Foundation served as the independent voice in the negotiations and has signed off on the proposal.

Marty Nee, an AT&T Wireless Services spokesman, said the state's six licensed wireless carriers have embraced the bill because it would allow the industry to expand its networks with less state and local interference.

Nee said he had been authorized to speak for his company and for Bell Atlantic Mobile, Sprint PCS, Nextel Communications, Omnipoint Communications, and Cellular One.

"We have come together as an industry on this because we are viewing it as good for business," he said. "But it is a major concession on our part. We are giving up the right to go to the DTE and circumvent local zoning."

However, Virginia Hines, who has recently organized the Massachusetts Council on Wireless Impacts from her Concord home, calls the amendment a "sellout to industry" and notes that most of the wireless antenna facilities sited over the last several years would have been exempted under the Mass. Municipal plan.

"Eventually, as current antennas are replaced, everything would become 'minor' because there will be no need for more towers," she said.

Hines is also concerned because the proposal does not take into consideration the growing concern about potential health threats from the antennas' electromagnetic waves.

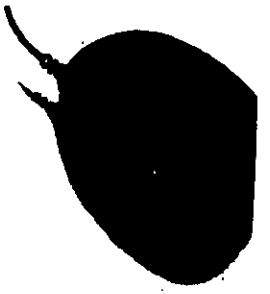
But Kezer said as long as antennas meet radiation standards set by the Federal Communications Commission, communities can consider only aesthetic impacts in their siting decisions.

"There are other local laws in place that would prevent an antenna in an unpopular location," Kezer argued.

And Pike noted that the bill does not prevent a community from adding public notification requirements to building permit applications.

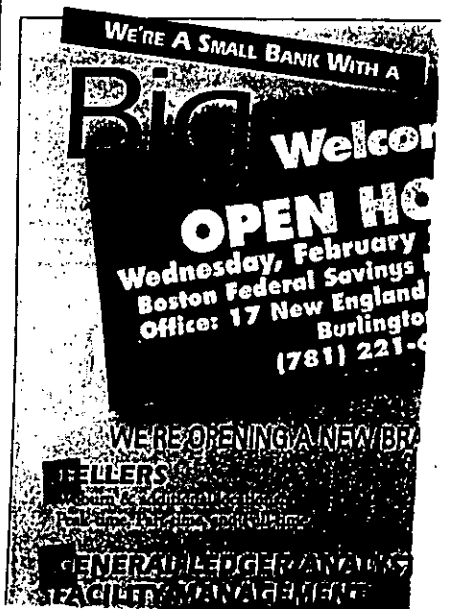
"The bottom line is that the industry has been using the threat of a DTE appeal as the way to gain the upper hand in local negotiations," Kezer said. "This is a compromise . . . that gives back local control to the communities."

Click. Click.



Imagine you're sitting a
You check your e-mail, and find you h
two other people are interested in meet
at The Post Club, where we *now* combi
tions and video profiles with *int*
Dating has never been

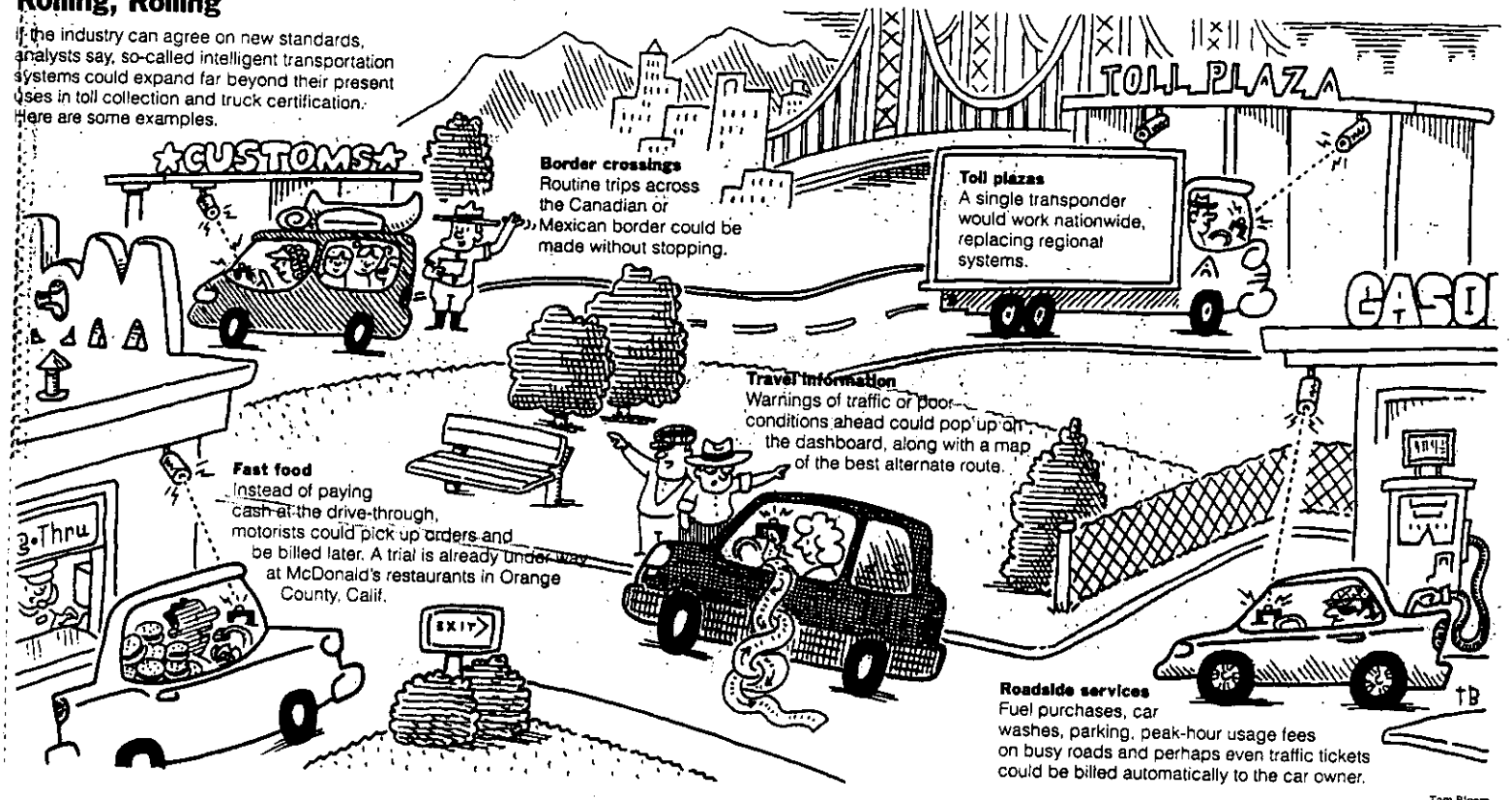
THE POST
Events & Introductions F
www.postclub.com



Conference to study women, the workplace

Rolling, Rolling

If the industry can agree on new standards, analysts say, so-called intelligent transportation systems could expand far beyond their present uses in toll collection and truck certification. Here are some examples.



Tom Bloom

A Push to Agree on a Drive-Through Future

First, the Toll Plaza. Next, the World?

By AMY ZUCKERMAN

IMAGINE your car as a digital appliance, like a laptop computer or a cellular phone. Picture rolling through any toll plaza in North America without having to stop — and picking up your e-mail as you pass. Warnings of traffic jams or poor road conditions ahead pop up on your dashboard, along with a map of the best alternate route. Drive-through fast food, fuel, a wash and wax for the car, parking in a downtown garage, are all charged to your monthly bill without human intervention.

Those images and more are the vision held out by proponents of what are called "intelligent transportation systems." Now largely confined to automated toll collection, like the EZ-Pass system on many toll roads and bridges in the Northeast, I.T.S. depends on short-range communication between a small radio transponder in the vehicle and fixed stations on the roadside.

Manufacturers say the industry is on the brink of achieving much of its grand plan of convenience and efficiency for motorists and truckers, especially now that the government has set aside a valuable new patch of the frequency spectrum, the 5.9 gigahertz band, for their use.

But first, analysts say, two crucial questions must be settled: What nationwide, industrywide technical standard should be established? And can the mainly small companies in the industry find the resources to make the leap on their own, or must they form alliances with deep-pocketed partners in the cellular-phone industry?

The four main vendors of the systems are scheduled to meet this week to discuss those issues. Joining executives of Amtech Systems, a division of **Intermec**, at their offices in Dallas will be representatives of the Sirit Corporation of Markham, Ontario; **Mark IV** of Mississauga, Ontario; and Highway Transportation Management Systems, a unit of **Raytheon**, the military contractor based in Marlboro, Mass.

Until now, the four companies have operated in a relatively small but safe market for limited-purpose transponders, according to Dick Schnacke, international standards manager at Amtech. Mr. Schnacke put Amtech's sales to toll agencies at about $85 million last year, and it is one of the two leading vendors, along with Mark IV, maker of EZ-Pass. But as ambitions for multipurpose systems soar, it is not clear whether the manufacturers will be able to realize all their ambitions unaided. "You can build equipment, but you may not have the infrastructure in place to provide services," Mr. Schnacke said.

ITS America, a trade association that promotes wider adoption of the systems, sees great promise in marrying the technology with cellular telephony, according to Paul Najarian, the group's telecommunications director. Cellular systems are already in place nearly everywhere in the country; a link would open the possibility of partnerships with deep-pocketed giants like **Qualcomm, Motorola** and **Lucent Technologies**. So far the major cellular companies have not said whether they have any interest.

Making a cellular connection, Mr. Najarian said, would "allow us to do 'p-commerce,' point-specific transmission from a Burger King, for example, or to download from specific points like the Internet." Many companies are already at work on potential in-car Internet applications, he said, among them **America Online**, whose recently acquired MapQuest unit aims to provide customized maps to motorists, and **SmartMove USA**, a Belgian-owned company that has developed a technology to download an entire Java application into cars as they pass a transmission point.

But some vendors worry that marrying cellular systems may erode their own products' unique advantages. "The dedicated short-range communication medium allows you to make a dedicated transaction from a known location," Mr. Schnacke said. "Cellular can't do that. It can get within 100 feet, but that's not good enough."

High on the agenda for the Dallas meeting, he said, is the question of whether to expand the industry's standard-setting circle to include cellular companies.

Under a mandate from Congress, the Department of Transportation is financing the development of more than 100 related technical standards, from basic transponder design to highway safety and navigation applications, all aimed at so-called national interoperability — in other words, having every vehicle's transponder work everywhere for all purposes.

EXPERTS like Lee Armstrong, a Boston-based consultant working on the standards, say a move to the 5.9 gigahertz band will make achieving that goal simpler, because the mutually incompatible systems now in use in different regions of the country use other frequencies.

The use of intelligent transportation systems would catch on faster if auto makers built transponders into the cars they sold, Mr. Armstrong said, but that won't happen until a standard is established and the automakers discern consumer demand.

"It's a chicken-and-egg thing," he said. "A large number of people won't want built-in transponders unless they see a large number of applications. If we can get a standard developed, it would go a long way to driving public acceptance." But if no standard is agreed on soon, he warned, fast food chains and fuel retailers will move ahead with existing technology and chances for a national system will recede.

Christine Johnson, who directs the Transportation Department office responsible for intelligent transportation systems, said the government would back a national 5.9-gigahertz technical standard, though it would also continue to develop standards for commercial-vehicle transponders using older technology. "The 5.9 gigahertz approach," Ms. Johnson said, "allows for additional applications, and there is some overlap with Japan and Europe, so it puts us closer to a global market than just a North American market."

With the high expectations pinned on I.T.S. systems and the onrush of new technology, the government is on "a tough road," Ms. Johnson said. "In other arenas we've been quite successful in convening the industry and catalyzing them to a consensus," she added. "We can try to foster an industry standard, but we can't force it."

Plenty of issues remain to be worked out, including whether existing toll plaza equipment can be adapted to a new standard or must be replaced and whether the industry can deliver a workable system as fast as many proponents hope.

Commercial fleet owners like trucking companies are among those most impatient for a nationally interoperable system. Cross-country truckers now have to carry multiple transponders for incompatible systems at toll lanes, weigh stations and truck stops. Standardizing on a single system could speed freight movement across the country and, if used at border crossings, to and from Mexico and Canada.

Steve Keppler, commercial vehicle manager for ITS America, said that equipment to perform these tasks was all feasible, but might be significantly more expensive than today's generation of transponders. So one more question is on the table: Who will pay for the new system, users or taxpayers? □

Attachment C

From: "Michael J. Carter" <mike.carter@unh.edu>
To: bridge.amherst.tape@juno.com, bcbelvin@isone.com
Cc: dnovak@sugar-river.net
Date: Mon, 21 Feb 2000 14:21:09 -0500
Subject: Hearing on HB 733

Andy and Betsie, Bill, and Don:

For your information, here is a letter I sent to those state senators on the committee who have e-mail addresses. I did not try to send FAX copies to the other members, but could do so tonight or tomorrow morning. Andy, can you furnish FAX numbers for the others on your list? All of the committee members are welcome to receive a copy of this letter.

Thanks again to Andy, Betsie, and Bill for keeping this process on track and alive!

Best regards,

Mike

>Date: Mon, 21 Feb 2000 14:15:02 -0500
>To: Fbking@aspi.net
>From: "Michael J. Carter" <mike.carter@unh.edu>
>Subject: Hearing on HB 733
>Cc: cbelow@tpk.net, burtc@nh.ultranet.com,
>beverly.hollingworth@leg.state.nh.us, carljean@worlpath.net
>Bcc:
>X-Attachments:
>
>
>Dear Senator King,
>
>My university teaching responsibilities preclude my attendance at
>tomorrow's public hearing of HB 733 (Deployment of Personal Wireless
>Service Facilities) before the Senate Committee on Energy and Economic
>Development. Nevertheless, as one who was an active participant in the
>public hearing of HB 733 before the House Committee on Science,
>Technology, and Energy, I am compelled to offer this letter of support in
>lieu of my physical presence!
>
>Over the past 3 years, I have helped educate town planning boards and
>citizen groups in several New Hampshire communities about technical issues
>in the siting and design of wireless communication facilities. As a
>consequence of my work, I have learned that even the most well informed
>town governments are often unaware of the extent to which they may
>regulate the deployment of personal wireless service facilities, including
>cellular telephone base stations. It has also been evident to me that
>many fellow citizens cherish our state's scenic vistas, as do our tourist
>guests, and that tall, highly visible antenna mounts have impact beyond
>the legal boundaries of the communities in which they are placed. HB 733
>addresses each of these concerns without being unduly burdensome on any

of
>the affected parties and, most importantly, it upholds the New Hampshire
>tradition of strong local control of land use policy. It is "enabling"
>legislation in the best sense of that word: it informs, grants only the
>degree of authority necessary for sound community development planning,
>and imposes relatively little administrative burden upon state and town
>governments and the business community.
>
>The most important feature of HB 733 is its provision for regional
impact
>notification when a new personal wireless service facility is proposed
to
>be constructed. It provides a "voice at the table" for all affected
>communities while reserving the final decision authority to the
community
>in which the wireless facility is to be located. It authorizes
>communities to seek, at their discretion, information from personal
>wireless service providers that is relevant and necessary to the orderly
>deployment of a rapidly expanding wireless telecommunications
>infrastructure. Finally, it empowers the Office of State Planning to
>begin the process of formulating a "model ordinance" upon which our
>communities might base their own local regulations with regard to siting
>and design of personal wireless service facilities. From my experience
>with town planning boards, I can attest to the fact that very few New
>Hampshire communities have either the technical or legal resources
needed
>to craft such ordinances without considerable, often expensive, outside
>help. HB 733 would assist our communities in both the review of
>applications for new personal wireless service facilities and the
>promulgation of reasonable, legally defensible regulations covering such
>facilities.
>
>In my brief foray into the legislative arena last year, I learned that
>most legislators want to know "Who will bear the burden of the proposed
>legislation?" HB 733 offers minimal burdens to each of the affected
>constituencies:
>
>To the business community,
>
>- it imposes only one mandatory requirement upon personal
> wireless service providers: they must
>furnish proof of their eligibility under federal law to offer such
>services within our state. This requirement does not impede legitimate
>service providers or their agents from proposing the construction of new
>facilities, but is intended to preclude speculative development in
>"vertical real estate" by those entities who are not contractually
>affiliated with legitimate service providers.
>
>- it imposes additional informational requirements only at the request
of
>the community in which the facility is proposed to be located, and then
>only for such information as the personal wireless service provider
would
>maintain, for its own purposes, in the normal course of business.
>
>- it does not impose any new fees, save for those minimal costs
associated
>with regional notification.
>
>To the local government,

>
>- it requires only that towns carry out the regional impact
notification
>in cases of proposed personal wireless service facilities that would be
>visible beyond town boundaries.
>
>- it does not compel any other action on the part of local governments,
>and does not impose any unfunded mandates on local communities.
>
>- it would, in the near future, strengthen the ability of the Office of
>State Planning to assist local communities in their review of
applications
>for new personal wireless service facilities and in their development of
>locally attuned ordinances governing the siting and design of such
>facilities.
>
>To the state government,
>
>- it requires the Office of State Planning to prepare and maintain a
map
>showing the locations of all personal wireless service facilities in the
>state. However, the information necessary for this task is obtained
>directly from the personal wireless service providers themselves and, as
>noted above, is maintained by the providers in their normal course of
>business.
>
>- it enables the Office of State Planning to begin the process of
drafting
>a "model ordinance" for the siting and design of personal wireless
service
>facilities, but does not mandate such action.
>
>
>HB 733 is the result of a series of arduous public hearings before the
>House Committee on Science, Technology, and Energy. These hearings were
>well attended by representatives of the wireless telecommunication
>industry as well as ordinary New Hampshire citizens. HB 733 looks much
>different than the version of the bill that was originally proposed, and
I
>must confess that I was initially dismayed upon reading the version now
>before you. With the passage of time, however, I have come to see the
>amendments to HB 733 as a positive reflection of the New Hampshire ethos
>of strong local government.
>It addresses an important practical concern of many communities in a
>manner that does not override their unique styles of local governance.
>
>I respectfully urge your support, and that of your fellow senators, for
HB
>733 during tomorrow's public hearing.
>
>
>Very truly yours,
>
>Michael J. Carter
>4 Willey Rd.
>Durham, New Hampshire
>
>Tel: 868-6588 (H) 862-4328 (W)
>E-mail: mike.carter@unh.edu
>

>
>(P.S. For the record, I am a professor in the Department of Electrical
>and Computer Engineering at the University of New Hampshire, and I have
>served as a wireless communication systems consultant to New Hampshire
>towns and citizen groups, primarily on a pro bono basis, for the past 3
>years.)
>
>

Attachment D

PERSONAL WIRELESS SERVICE FACILITIES

QUESTIONS AND ANSWERS

QUESTION	ANSWER
1. Does Federal law allow States and local communities to regulate the deployment of Personal Wireless Service Facilities?	YES (See Section 1.)
2. Does Federal law mandate that we have tall cellular towers?	NO (See Section 2.)
3. Are there commercially available alternatives to tall cellular towers?	YES (See Section 3.)
4. Do we have to be "technical" experts in order to regulate the wireless telecommunications industry?	NO (See Section 4.)
5. Can we insist that wireless carriers utilize alternatives to tall cellular towers even if they are more expensive?	YES (See Section 5.)
6. Haven't most of the tall cellular "towers" that this industry needs already been constructed and aren't most of them needed only along our major highways?	NO (See Section 6.)
7. Are there different methods of co-locating antennas other than placing them on one tall "tower" mount?	YES (See Section 7.)
8. Are all companies that wish to build personal wireless service facilities (PWSF's) licensed wireless telephone companies?	NO (See Section 8.)

Prepared By:
Andrew Bridge
19 Woodland Dr.
Amherst, NH 03031
(603) 673-5326
E-Mail bridge.amherst.tape@juno.com

November 14, 1999

SECTION 1.

FEDERAL LAW ALLOWS COMMUNITIES TO REGULATE THE DEPLOYMENT OF PWSF's.

The Federal Telecommunications Act of 1996 specifically preserves state and local zoning authority over the placement, construction, and modification of personal wireless service facilities.

Communities have the legal authority to regulate the deployment of PWSF's provided that they

1. do not discriminate among personal wireless service carriers.

2. do not prohibit or have the effect of prohibiting the provision of personal wireless services.(PLEASE SEE NOTE ***BELOW)

3. act upon any request to site a PWSF within a reasonable time. If a site application is denied the denial must be in writing and supported by substantial evidence contained in a written record.

4.do not regulate the placement, construction, and modification of a PWSF based upon the environmental effects of Radio Frequency (RF) emissions from these facilities provided that these emissions comply with FCC regulations.

References:

*The Federal Telecommunications Act of 1996 (Public law 104-104, February 8, 1996). Section 704-Preservation of Local Zoning Authority.

*Federal Communications Commission fact sheets 1 and 2, National Wireless Siting Policies.

***NOTE: The Federal Circuit Courts of Appeal have ruled that the requirement by local communities that wireless companies use alternatives to tall cellular towers does NOT have the effect of prohibiting the provision of personal wireless services.

See Amherst vs Omnipoint Case 98-2061 First Circuit
AT&A vs Virginia Beach Case 97-2389 Fourth Circuit
Sprint vs Willoth, NY Case 98-7442 Second Circuit

All these cases can be accessed at http://laws.findlaw.com

SECTION 2.

TALL CELLULAR TOWERS ARE NOT MANDATED BY FEDERAL LAW.

The Federal Telecommunications Act of 1996 (TCA) does not mandate that we have tall cellular towers. The TCA has only one section, Section 704, dealing with State and local rights concerning "facilities siting" and the word "tower" never appears.

The text of Section 704 is as follows:

SEC.704 FACILITIES SITING; RADIO FREQUENCY EMISSION STANDARDS.

(a) National Wireless Telecommunications Siting Policy.-Section 332(c) (47 U.S.C. 332(c)) is amended by adding at the end the following paragraph:

"(7) PRESERVATION OF LOCAL ZONING AUTHORITY.-

"(A) General Authority.-Except as provided in this paragraph, nothing in this Act shall limit or affect the authority of a State or local government or instrumentality thereof over decisions regarding the placement, construction, and modification of personal wireless service facilities.

"(B) Limitations.-

"(i)the regulation of the placement, construction, and modification of personal wireless service facilities by any State or local government or instrumentality thereof-

"(I) shall not unreasonably discriminate among providers of functionally equivalent services; and

"(II) shall not prohibit or have the effect of prohibiting the provision of personal wireless services.

"(ii)A State or local government or instrumentality thereof shall act on any request for authorization to place, construct, or modify personal wireless service facilities within a reasonable period of time after the request is duly filed with such government or instrumentality, taking into account the nature and scope of such a request.

"(iii) Any decision by a State or local government or instrumentality thereof to deny a request to place, construct, or modify personal wireless service facilities shall be in writing and supported by substantial evidence contained in a written record.

"(iv) No State or local government or instrumentality thereof may regulate the placement, construction, or modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to

the extent that such facilitates comply with the Commission's regulations concerning such emissions.

"(v) Any person adversely affected by any final action or failure to act by a State or local government or any instrumentality thereof that is inconsistent with this subparagraph may, within 30 days after such action or failure to act, commence an action in any court of competent jurisdiction. The court shall hear and decide such action on an expedited basis. Any person adversely affected by an act or failure to act by a State or local government or any instrumentality thereof that is inconsistent with clause (iv) may petition the Commission for relief.

"(C) DEFINITIONS.-For the purposes of this paragraph-

"(i) the term 'personal wireless services' means commercial mobile services, unlicensed wireless services, and common carrier wireless exchange access services;

"(ii) the term 'personal wireless service facilities' means facilities for the provision of personal wireless services;

"(iii) the term 'unlicensed wireless service' means the offering of telecommunications services using duly authorized devices which do not require individual licenses, but does not mean the provision of direct-to-home satellite services (as defined in section 303(v)).".

The TCA talks about Personal Wireless Service Facilities (PWSF's) and defines these as:

" facilities for the provision of personal wireless services;"

A tall cellular tower does not equal a Personal Wireless Service Facility. A tall cellular tower is simply one part of one type of PWSF. Please see the attached diagram of the components of a PWSF.

References:

* The Federal TCA of 1996

* FCC Fact Sheets 1 and 2

COMPONENTS OF A PERSONAL WIRELESS SERVICE FACILITY

ANTENNA	SECTORED ARRAY
^	DUAL POLARIZED
^	
^	
MOUNTS	BUILDINGS
^	WATER TOWERS
^	ELECTRICAL TRANSMISSION LINES
^	SILOS
^	CHURCH STEEPLES
^	MAST POLES
^	FLAGPOLES
^	LIGHT POLES
^	SIGN POLES
^	ARTIFICIAL TREE POLES
^	LATTICE TOWER
^	MONOPOLE TOWER
^	RANGER LOOKOUTS
^	UNLIMITED NUMBER OF CUSTOM DESIGNS
^	
BASE STATION ELECTRONICS	CUSTOM DESIGNED ABOVE OR BELOW GROUND STRUCTURES
^	WATER PROOF UNDERGROUND VAULTS
^	HIDDEN STATIONS WITHIN EXISTING BUILDINGS

SECTION 3.

COMMERCIALLY AVAILABLE ALTERNATIVES TO TALL CELLULAR TOWERS

There are numerous ways to provide for personal wireless services without using tall cellular towers. These include off the shelf and custom designed methods for hiding, camouflaging, and disguising PWSF's.

ALTERNATE METHOD OF DEPLOYMENT	COMPANY INDEX
Hidden, Camouflaged, Disguised systems	
1. panel mount antennas for sides of building	B, D
2. mast mounted dual polarized antennas	A, B,C ,D,E
3. arrayed antenna on top of power line towers	C
4. road signs	D
5. street lights	D,E,F
6. banner poles	E
7. flagpoles	C, D,F
8. artificial tree poles	A,C, F
9. ranger lookouts	E
10. farm silos	D
11. custom designs	A, B, C, D,E,F

COMMERCIALLY AVAILABLE ALTERNATIVES TO TALL CELLULAR TOWERS

COMPANY INDEX

COMPANY NAME	PRODUCTS	CONTACT NUMBERS
A. Alan Dick & Co.	Polarization diversity antenna Artificial tree poles	(603) 598-4500 www.alandick.com
B. Allen Telecom Decibel Products	Diversity antennas dB "Triple Tree PCS Antenna"(tm) Diversity master antennas	(800) 676-5342 www.decibelproducts.com click on new products
C. F W T, INC.	Power Mount Flagpoles Artificial Pine Trees Church Steeples Light Poles	(800) 433-1816 www.fwtinc.com
D. Stealth Network Technologies	Silo Design Custom Designs Flagpoles Street Lights Road Signs	(800) 755-0689 www.stealthsite.com
E. Telestructures	Banner Poles Ranger Lookouts Street Lights Custom Designs	(770) 261-3100 www.telestructures.com
F. Valmont/ Microflect	Artificial Tree Poles Street Lights Flagpoles Custom Designs	(800) 825-6668 www.valmont.com

Please note: This is not meant to be a complete list but rather only a sampling of commercially available alternatives to tall cellular towers.

SECTION 4.

THIS IS A PLANNING ISSUE NOT A TECHNICAL ISSUE.

It is not the responsibility of the Planning Boards of our local cities and towns to be "technical experts" in radio frequency propagation.

It is our responsibility:

1. to understand Section 704 of the Telecommunications Act of 1996, the governing law under which our authority to regulate this industry falls.

2. to determine how we want our communities to look after the build out of these PWSF's is completed.

3. to establish clear planning guidelines under which wireless carriers must operate in order for us to arrive at the end we desire.

SECTION 5.

A CARRIER'S COSTS OF DEPLOYMENT ARE NOT OUR CONCERN.

There is nothing in the TCA that prohibits a State or local government from insisting upon alternative methods of deploying PWSF's, even if these alternatives are proven to be more expensive.

Likewise, there is nothing in the TCA that prohibits a carrier from passing along added costs of deployment to their subscribers.

Even if it can be shown that alternative deployment methods are more costly, there is still nothing in the governing law to prevent our requiring they be used.

SECTION 6.

WE ARE IN THE EARLY STAGES OF THE DEPLOYMENT OF THESE WIRELESS SERVICES

The explosion in the construction of new tall cellular "towers" during the past three years represents not the end but rather only the beginning of the deployment of these wireless services. The facilities that we currently see are meant to provide service to primarily the mobile user, hence the term car phone.

This first phase of deployment is called the coverage phase. During this phase the industry wants to obtain as much geographic coverage as possible, especially along major travel routes, for the lowest cost. As more and more people purchase wireless phones and use them away from home the industry will become concerned about the capacity of their systems. As usage increases they will need to add more cell sites in order to avoid busy signals. This point marks the beginning of the coverage phase of the build out.

However, the industry is not just hoping that people will use their phones only while they are mobile and away from home. Their goal is made clear in AT & T's own ads, lets *"make your wireless phone your only phone"*. This industry has its sights set on the stationary business and residential users.

These users will not be moving while talking on their wireless phones. Therefore, they will tie up individual channels longer than would the mobile user whose signal would be passed on to the next cell site as they travel along. As more and more people use their wireless phones as stationary phones, say from home, capacity will become the major concern of this industry. Since each antenna cell can only handle approximately 150 calls at a time, more and more antenna cell sites will be required. These will be located not just in industrial areas, not just in commercial areas, and not just along our highways, but rather in our residential neighborhoods.

The number of antenna sites required will increase at an alarming rate as an average of five major companies rush to capture the residential wireless market. These antenna sites will, by necessity, be located in residential areas.

Without wireless telecommunications ordinances designed specifically to plan for the current and future deployment of the more than 450,000 additional cell sites that this industry itself estimates it will need nationwide in the next three to five years, communities will be overrun with visually inappropriate tall cellular towers.

Before the passage of the Federal Telecommunications Act of 1996 there were only a very small number of personal wireless service facilities (PWSF's). Most of these were constructed as tall cellular "towers". Since the TCA's passage, new tall cellular "towers" have been constructed at an alarming rate.

As this industry matures and we enter the capacity phase of this build out, this growth rate for new PWSF's will increase dramatically. If our local cities and towns fail to plan for this growth, most of these personal wireless service facilities will be constructed in the form of tall "towers".

The goal of preserving our natural and scenic beauty and the goal of allowing for the deployment of these new wireless services are not mutually exclusive. We can have both. To do so, however, will require that we act now and insist upon the use of visually appropriate PWSF's.

SECTION 7.

THERE ARE MANY DIFFERENT MEANINGS TO THE TERM CO-LOCATION

The term co-location generally means that more than one group of antennas is located at an individual wireless communication site. When the industry talks about co-location they try to define it as vertical co-location. They tout vertical co-location as a good thing, often phrasing their comments along the following lines:

"Its better to build one tall tower and then let two or more companies co-locate on it rather than making each individual company build their own tower."

While this seems to make sense, it is based upon the faulty premise that "towers" are needed in order to provide the service. Once it is recognized that tall "towers" are not needed the fallacy of this argument becomes apparent.

While co-location might mean vertical co-location such as the flagpole from Stealth Network Technologies that accommodates antennas from three carriers in one flagpole or the artificial pine tree pole from Valmont that can handle multiple carriers antennas, co-location can also mean horizontal co-location. Here antennas are placed side by side on the same wireless communications site. This horizontal co-location reduces the overall height needed for the antenna mounts to just over the treetops therefore protecting the viewshed.

Local planning and zoning boards need to be aware that alternatives to vertical co-location exist so that they can decide which, if any, are best suited for their community.

SECTION 8.

THERE ARE TWO MAJOR GROUPS OF COMPANIES THAT WISH TO BUILD PWSF'S.

The first group is the wireless carriers themselves. These are companies such as Bell Atlantic Mobile, Cellular One, AT & T, Omnipoint, Sprint, Nextel and others. These companies have paid or promised to pay the FCC millions of dollars for the right to use certain radio frequencies. They are referred to as licensed wireless companies.

Their revenues come from the individuals to whom they sell wireless telephone services. They are interested in providing their customers with the greatest geographic coverage at the lowest possible cost to themselves. If they meet little or no resistance to their requests to build tall cellular "towers", then that's what they will attempt to do.

However, if they are met with resistance to tall "towers" they will often agree to build a greater number of shorter and disguised PWSF's . They are willing to do this because their revenues come from all of the individuals who buy their wireless telephones. The total cost of a facility will be spread out over a large number of individual customers making it imperative that they get their systems up and running quickly.

The second group of companies that may wish to build PWSF's are speculative real estate companies. These companies build facilities and then lease out antenna space on them to not only licensed wireless carriers, but other companies as well. Their revenues come not from the large number of end users of wireless telephones, but rather from the relatively small number of companies to whom they lease "tower" space.

Therefore they have a greater incentive to only build tall "towers". These tall "towers" are known as **vertical real estate**. For example, if a facility costs them $200,000 to build, they can recover their costs much faster if they rent space to four or five licensed carriers rather than only one. Therefore, they want to build tall so as to have more vertical lease space.

When faced with an application to build a tall "tower" facility, towns should make sure that they ask who will actually own the facility. These vertical real estate companies may not be covered by the Federal TCA.

Attachment E

Trends in the Telecommunications Business

The FCC has granted certain rights under the TCA of 1996 to Personal Wireless Service (PWS) providers who purchase frequency spectra at the FCC auctions. In return, these providers are required to make available specific coverage to the region specified in each license.

- PWS provider rights – local communities cannot prohibit the deployment of PWS facilities
- PWS provider responsibilities – coverage must be made available to 25 percent of the population within 5 years, and 50 percent within 10 years[1] – or lose their rights to the FCC license

Wireless Telecommunications Strategy

PWS providers anxious to gain market share in the selected regions are spending heavily to capture it. Subscribership is extremely important, and the major factors that can influence this are 1) service provided, and 2) price for that service. Provided service relies heavily on the extent of geographical coverage, which – in turn – is dependent on the territorial distribution of PWS facilities.

- A "typical" deployment of a PWS facility consists of erecting 180-190' lattice tower (or a 180' monopole) with an antenna array for the provider and available space for two to four additional co-locators. Additionally, a structure is located on site to house electronics. The costs for such facilities varies widely (and is not public information), but it appears that the average cost in the NH region ranges from $150,000 to $250,000 with an average of $185,000[2]
- The FCC license is used to gain access to the properties and influence the local zoning ordinances (negotiating for waivers when necessary).
- Once the tower is erected, there is a general trend in the industry to 'recoup' the invested capital by selling the tower facility to a separate company specializing in "Vertical Real-estate", such as American Tower, Inc.; Crown Castle, International; U.S. RealTel; SBA; SpectraSite Communications; and others. The provider then leases back space for its own antenna array. Additionally, this "tower company" will lease to other providers.

This arrangement demonstrates a fundamental flaw and loophole in the federal legislation – tower companies, who desire co-location, do not have the Federal authority to mandate personal wireless service facilities in local communities. The potential arises for competing providers to deny access on existing PWS facilities. In fact there are numerous examples in New Hampshire of two 190' lattice towers being constructed adjacent to each other, rather than co-locating. This potential has given rise to the exploitation of site acquisition and subsequent sale of tower sites.

The asset and revenue opportunities are enormous. Based on public announcements (from a subset of the US-wide market) from tower companies[3], over a two-year period 6746 towers changed ownership for a total of $2.99B at an average cost of $443,628.82 per tower. Monthly lease agreements (those published) range from $1200 to $5500 per month per antenna array.

---

[1] Cited in United States Court of Appeals for the First Circuit – No. 98-2061, Town of Amherst, New Hampshire v. Omnipoint Communications Enterprises, Inc., March 30, 1999
[2] Wireless Week, March 22, 1999 "Crown: King of Towers"
[3] References: American Tower Cooperation, Crown Castle International Cooperation, U.S. RealTel, Inc, SBA Communications Cooperation, Wireless Week

State responsibilities

The TCA insures there will be a timely deployment of personal wireless service facilities. But it does not mandate tall towers nor relinquish local or state level control of zoning laws and restrictions[4]. In fact, there is pending legislation in the US Senate to strengthen this emphasis on local control[5] within the context of the Telecommunications Act. The State has the responsibility to provide guidelines:

- Uniform rules across the state will help maintain competitive equality between providers.
- Consistent guidelines set reasonable expectations of PWS facilities rollout efforts.
- Minimize the litigation between Providers and Local municipalities, which reduces overall cost (to both providers and towns) and speeds the approval process for facilities deployment.
- Preserve the natural scenic beauty of NH for her citizens, her tourists and future generations.

Alternatives to tall towers

There are a variety of approaches and technologies available to minimize the visual impact of these facilities. The dominant issues at the PWSF antenna are receiver signal strength and signal-to-noise ratio. Antenna technology developments (compact size, low profile polarization diversity) and the digital signal processing used to 'hear' the handheld transmitter are making dramatic improvements in received signal quality. Smaller lightweight antennas mean that the supporting structures need be less robust (and unsightly). They can also be more easily adapted for use on existing structures, such as buildings, water towers, light posts, transmission line structures, telephone poles, and existing communications towers. Additionally, there are numerous manufacturers of technologies to conceal the antennas, as is shown on the following pages.

The expense of these alternatives need not be unreasonable, and may be offset by the expedience of deployment. Also, a PWS provider acting as a socially responsible partner to the State can expect to attract a broader base of customers. Customer animosity does not aid the increase of subscribership.

State Master Plan

I'd like to cite a recent Boston Globe Article – which quotes Steve Berry, executive VP at the Cellular Telecommunication Industry Association (CTIA): "When people started putting up telephone poles and started stringing wire all over the United States – people thought that was fairly distasteful. After 150 years, people have come to accept it."

Even after 150 years, people don't like to look at them. They were installed by a Public Utility –not a private company. But even with a public utility, our Zoning Boards can demand that any new wires (as in a development) be buried. This state Master Plan will establish consistent guidelines to providers and local governments for cooperative efforts that encourages wireless telecommunications in New Hampshire while preserving the State's beautiful natural scenic resources.

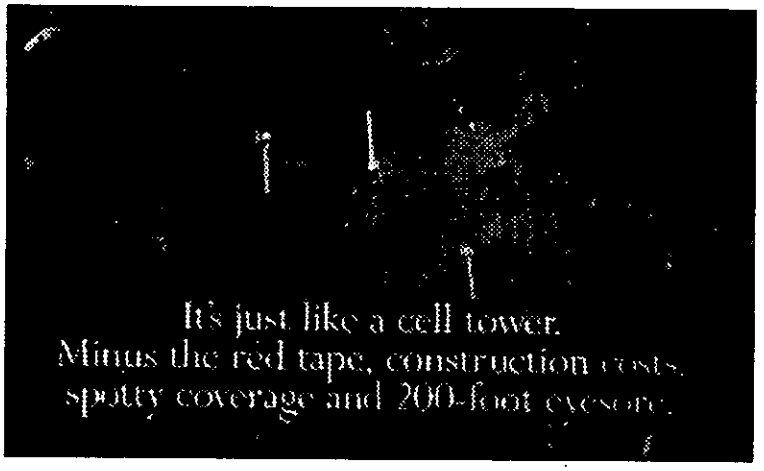
Provide the balance.....

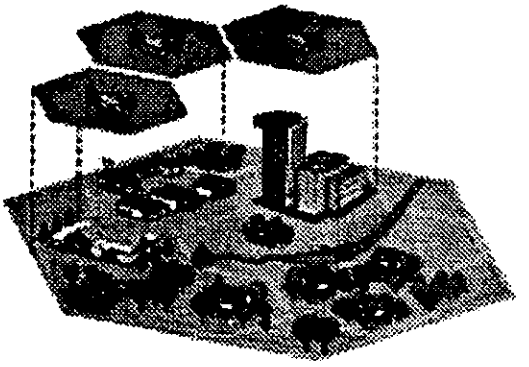
[4] See Telecommunications Act of 1996 Section 704; and also United States Court of Appeals for the First Circuit – No. 98-2061, Town of Amherst, New Hampshire v. Omnipoint Communications Enterprises, Inc., March 30, 1999; and also United States Court of Appeals for the Fourth Circuit – N. 97-2389, City of Virginia Beach v. AT&T Wireless, and N. 98-1985 AT&T Wireless v. Winston-Salem Zoning.

[5] See H.R. 952, "Local Zoning Preservation Act of 1999" sponsored by Representative Charles Bass

Sanders Telecommunications - Nashua NH

The Sanders PCS-Over-Cable System utilizes a broadband medium to transport RF signals between a BTS and a series of Cable Microcell Integrator (CMI) transceivers located in the area of interest. The CMIs function as remotely controlled frequency translators between the air frequency and the transport layer's intermediate frequency.

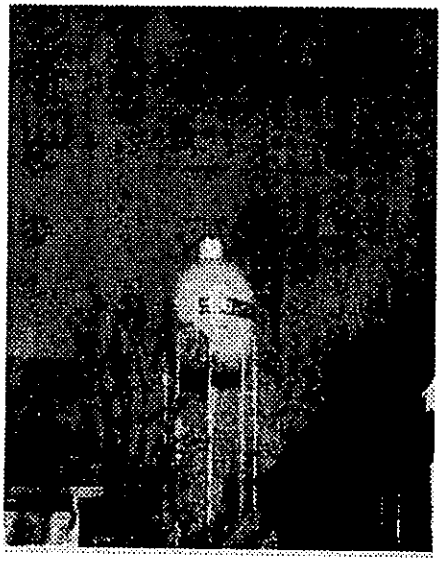


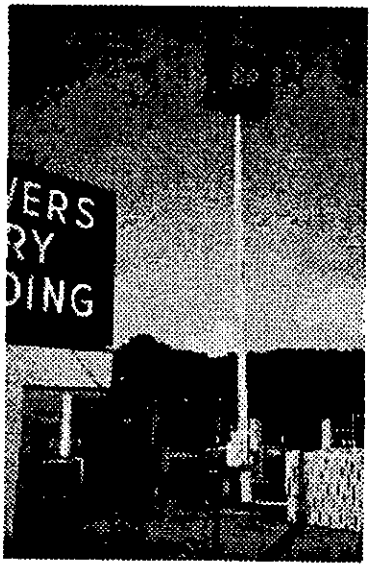


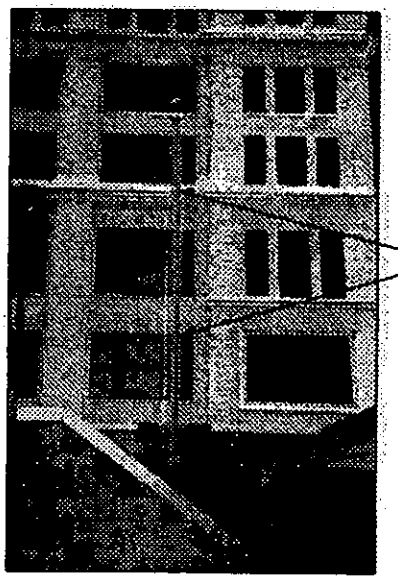
The hallmark of the Sanders PCS-Over-Cable system is its deployment flexibility. The system can be deployed for coverage and capacity purposes in both fixed and multi-tiered mobility networks.

Stealth Network Technologies, Inc. - North Charlston, South Carolina

Stealth Network Technologies, Inc. provides the telecommunications industry with a full range of services in antenna concealment.







Three antenna hidden in the flagpole

Valmont Microflect - Omaha, Nebraska

Valmont/Microflect is an industry leader in the development of camouflaged and multi-function communication structures. Because of their aesthetically pleasing design, the alternative structures can solve unique communication requirements and enhance the permitting process in difficult zoning locations. Each structure naturally blends into the surrounding environment and its antennas are hidden from view.

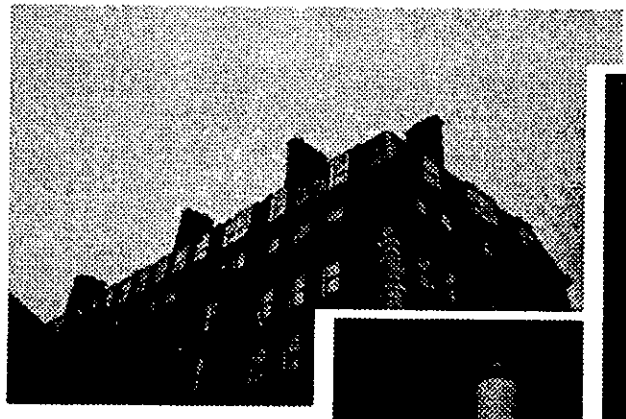


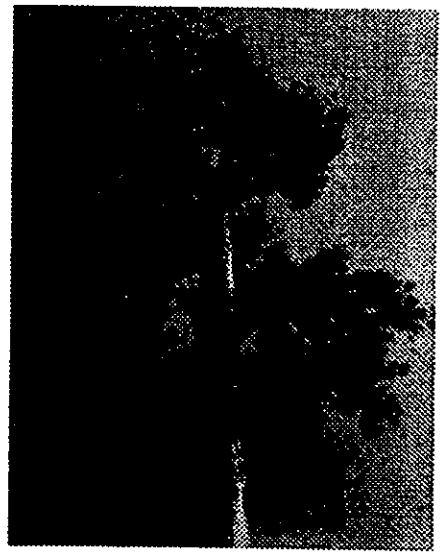


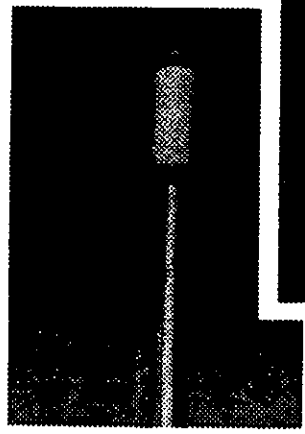
Alan Dick & Co (USA) Inc., Hollis New Hampshire

An industry leader in the design and manufacture of Polarization Diversity (XPD) Base Station Antennas and Broadcast Antenna Systems, based on Dual Polar technology.





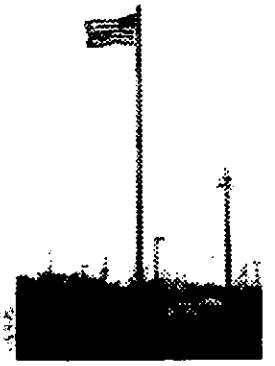




- Lighting (lamppost) poles
- Chimneys
- Advertising pole mounts
- Custom antenna and structure painting
- Custom fiberglass molding applications
- Special building mounts
- Slimline structures

UNIsite, Tampa, Florida

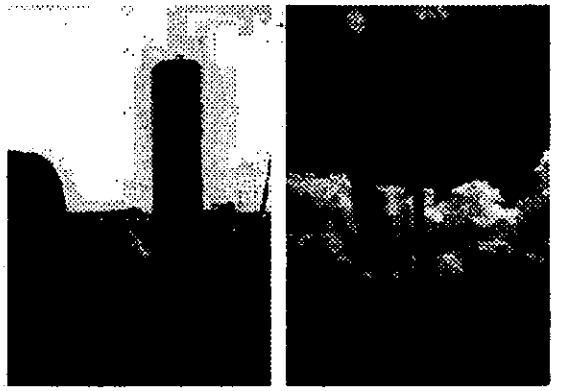
UNIsite's engineers have developed flagpoles of varying lengths, which can fill the wireless communications carrier's needs while blending in with the community's landscape. A large benefit of collocation (the sharing of an antenna site by multiple operators) is the ability to minimize the proliferation of towers in and around a community. Flagpoles are an integral part of most populated areas. The flagpole antenna is unobtrusive, yet can accommodate as many as six arrays internally.



PrimeCo Personal Communications, L.P., Westlake, Texas

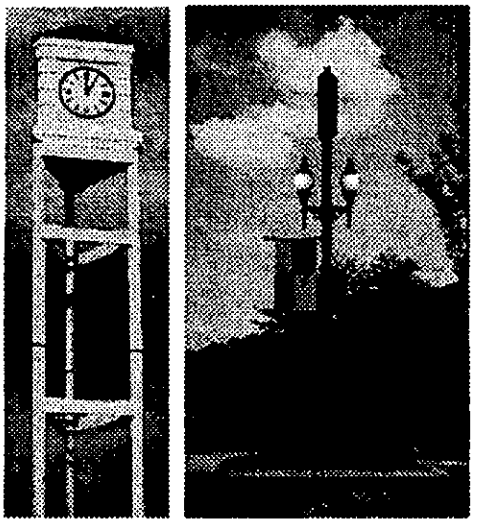
PrimeCo, formed in October of 1994, is a limited partnership owned by AirTouch Communications and Bell Atlantic. PrimeCo began providing digital wireless service to customers in November 1996.

Few people want wireless antenna towers in their backyards, but how about in a barnyard? About 65 percent of PrimeCo's transmission towers are located on existing structures, like this silo, which means fewer towers need to be built.



TeleStructures, Inc. – Alpharetta, Georgia

TeleStructures, Inc. has developed an entire portfolio of aesthetically attractive antenna site solutions designed to complement the community environment. Their innovativ site solutions can accelerate system builds, reduce individual site development cost, provide preferred aesthetic alternatives to traditional towers and resolve the negative issues of antenna clutter. TeleStructures' designs are cast using fiberglass and advanced plastics that are virtually RF transparent. Instead of adding to visual clutte the designs enhance the environment.



Sites in New Hampshire



Nashua, Dublin, Bedford, Amherst

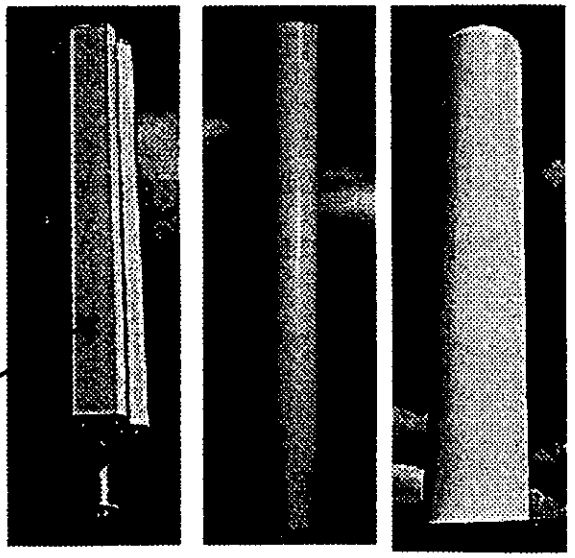
FWT, Inc., Arlington, Texas

When FWT, Inc. introduced PowerMount™ in 1995, the wireless telephone antenna system was hailed for its technological advance that allows wireless phone providers to put communications sites on existing electrical transmission towers. The added benefit is that PowerMount is almost unnoticeable, making it environmentally friendly.



Allen Telecom Inc, Decibel Products – Dallas, Texas

Allen Telecom Inc is a leading supplier to the worldwide two-way wireless communications marketplace of systems expansion products, site management products and antennas, and provides frequency planning, system engineering services and software design programs to current and emerging wireless markets.



11" diameter, omnidirectional, polarized high gain PCS

NEW HAMPSHIRE SENATE
107 North Main Street
Concord, NH 03301-4951
(603) 271-2111
TDD Access: 1-800-735-2964

MEMORANDUM

TO: **Honorable Jeanne Shaheen, Governor**
Honorable Donna Sytek, Speaker of the House
Honorable Beverly A. Hollingworth, President of the Senate
Karen O. Wadsworth, House Clerk
Gloria M. Randlett, Senate Clerk
Michael York, State Librarian

FROM: **Senator Clifton C. Below, Chair, 271-2709**

DATE: **December 1, 2000**

RE: **Report of the Committee to Study State Wireless Communications Policy, Established pursuant to HB 733, Chapter 240:2, Laws of 2000.**

Pursuant to Chapter 240:6, Laws of 2000, following please find the report of the committee to study state wireless communications policy. Please feel free to contact me with any questions or comments.

I. Introduction

During the 2000 session, effective 8/7/200, the General Court enacted HB 733, (Chapter 240, Laws of 2000) an act relative to a state master plan for the deployment of personal wireless service facilities and establishing a committee to study state wireless communications policy.

The duties of the committee were to review state policies regarding the use of state lands, state rights-of-way, state buildings, and other state facilities for wireless communications, including commercial, public, and quasi-public purposes, and how such policies balance varied public interests, including promotion of telecommunications, alternatives to tall cellular towers, public safety, public and municipal participation in siting decisions, and preservation of aesthetic, landscape, and historic values.

The members of the committee, appointed by the Speaker of the House and the Senate President, respectively, were: Representatives William Belvin, Jeb. Bradley, Richard Cooney, Naida Kaen, and Terie Norelli; and Senators Clifton Below, Burt Cohen, George Disnard, Sylvia Larsen, and Pat Krueger. The Speaker also appointed as alternates: Representatives Michael

Whalley, Charles Royce, Michael Downing, and Jay Rosenfield. Angela Richardson of the Senate staff provided staff support to the committee.

Meetings: At its organizational meeting on 8/10/00 the committee elected Sen. Below as Chair and Rep. Bill Belvin as Vice-Chair. The committee held a series of meetings on 8/16, 8/24, 9/14, 11/15, 11/21, and 11/29/00. At each meeting time was made available for members of the public and representatives of state agencies and industry interests to make comments to the committee. Minutes of all the meetings were kept and are on file.

Presentations, comments and written materials were received from the Office of State Planning, Department of Resources and Economic Development (Office of the Commissioner, Div. of Forest and Lands and Div. of Economic Development), Department of Transportation, Department of Safety (Office of the Commissioner, State Police, Div. of Fire Safety, Div. of Emergency Medical Services), Fish and Game Department, Division of Historical Resources of the Dept. of Cultural Resources, County Sheriffs, Police Chief's Association, various members of the public and local communities, including a presentation by Dr. Michael J. Carter of the Dept. of Electrical and Computer Engineering at UNH, and industry lobbyists and representatives, including a presentation by Dr. Peter A. Valberg of Cambridge Environmental on some of the technical issues and a written presentation by Dr. Susan F. Tierney of Lexecon, Inc. on the Economic Benefits of Wireless Telecommunications. Submitted materials and presentations are on file.

II. Findings:

- Wireless telecommunications are a vitally important and rapidly growing part of the state's commerce, public safety communication systems, and personal convenience amenities.
- It is in the interest of the state to encourage competitive, state-of-the-art wireless telecommunication services and products, including timely build-out of systems to provide extensive and reliable coverage throughout the state.
- As customer demand and use rapidly increases, the industry investment in build-out and the entrance of new competitors will continue, perhaps at exponential rates for a number of years. The number of PWSF (personal wireless service facility) locations (antennas in particular) can be expected to double or even triple within the next few years to a decade as the number, variety, and requirements of users increase.
- While wireless carriers originally developed most towers for antenna locations, most tall towers are now being developed by "vertical real estate companies" who are not technically building PWSFs, but rather lease space to carriers for the locations of PWSFs.
- Some forms of antenna mounts, particularly large and tall lattice towers that extend far above tree line on prominent mountain and hill tops can be very visually intrusive, with strong negative impacts on some, even many, citizens' and visitors' perceptions of our quality of life.

- It is in the interest of the state to discourage unnecessary or excessive degradation of scenic vistas and the quality of the visual landscape. This is important for tourism and the preservation of our cultural heritage and the beauty of our natural environment.
- Alternatives to tall towers for antenna mounts exist, with many innovative disguised, camouflaged, co-located, and monopole facilities already being deployed. There can be a number of trade-offs between technical requirements, costs, coverage, investment and impact on scenic and historic values. For example, tall towers may be cheaper for the developer and carrier and provide a large coverage area, but the number of customers using services within the cell area may be limited compared with more frequent shorter antenna locations. As customer usage increases, such as in more dense urban areas, antennas become more frequent with smaller cell or coverage areas (less height), while in rural areas, carriers are less concerned with capacity and more concerned with reliable coverage in remote hilly terrain, thus tending toward less frequent taller towers. If less obtrusive sites (such as co-locating on existing structures) are made more readily available at attractive costs compared with new tall tower sites, there may be a worthwhile trade-off to the industry in cases where they might invest in more frequent, less obtrusive locations, that may cost somewhat more for the coverage but that also give them more capacity for the future and greater community acceptance.
- In many communities in NH, MA and other states, local communities have been successful in reaching accommodations with the industry through regulations that allow for competitive timely deployment, while limiting negative visual impacts, such as by promoting disguised locations or monopoles that are limited in their height above tree line. Municipalities have the right to enact and enforce reasonable regulation of PWSFs to preserve local landscape values and scenic characteristics provided they do not have the effect of prohibiting the provision of personal wireless facilities and services.
- HB 733 took important first steps in enabling local communities to better regulate the build out of wireless facilities but many municipalities are still playing catch-up with industry applications. The Office of State Planning is now in a better position to help communities with information (a technical bulletin is being released), model ordinance options, and the new state map of tower locations.
- There are a number of areas where state law might be amended to even better enable local communities to provide reasonable regulation of wireless communication facilities while preserving scenic character. These are itemized under recommendations 4 and 6-8.
- The Division of Historical Resources is mandated under federal law and rules (Section 106 of the National Historic Preservation Act of 1966, as amended – 16 USC 470 – and 36 CFR Part 800, and in conjunction with the Telecommunications Act of 1996) to evaluate the effect of telecommunications projects on historical resources using specific guidelines for direct physical impact or indirect impact such as significant alteration or deterioration of the setting or character of a historic resource, such as a building or district that is either on or eligible for the National Register of Historic Places. PWSF developers have a responsibility under their licenses to make these applications. The Division can make 3 types of findings: no historic resources impacted, no adverse impact, or adverse impact (with suggested mitigation alternatives). Although these have no binding impact, local land use boards may consider these results and the industry is not

prone to ignore findings of adverse impact. The Division is supposed to complete review within 60 days of a completed applications. However, due to very limited staff time and a rapidly growing number of applications, the backlog of wireless facility applications has grown to over 100 in recent months and the industry has thus far been understanding and cooperative with the Division in the processing of these applications, including delays beyond the 60 days. This could become a bottleneck and serious problem for timely build-out of facilities and attention should be given to increasing funding for staff to process these federally mandated reviews, preferably from federal or industry funds as suggested in the recommendations. (Recommendations # 1 & 2)

- It should be clear that local land-use regulation bodies can give considerable weight to the Division's findings if they so desire and state agencies should be required to take the Division's recommendations into account. (Recommendation # 3)
- Sometimes visual impacts on historic resources will transcend town boundaries. Since NH lacks any kind of regional land use review or regulation, in such instances where there is a finding of adverse impact to a place on the National Registry of Historic Places, a municipality that might be adversely impacted should be given abutter status in another town's land use review of the impacting facility. (Recommendation #5) Some people believe some form of regional or state regulation should be considered where substantial impacts of tall towers carry across town lines. There is no recommendation in this regard at this time.
- There has been controversy surrounding construction of towers on state owned mountain tops. Due to budgetary constraints, in some instances towers have been built that may be taller or larger than necessary for public safety needs to accommodate commercial uses that helped pay for them. This is a controversial practice that should be avoided if at all possible and certainly carefully considered going forward. Vital public safety communication needs require particular heights in certain locations. For instance the facilities on Mount Kearsarge provide critical relays to four other locations, including direct line of site microwave relays to Cannon Mountain, Moose Mountain in Hanover and Pitcher Mountain in Stoddard. The highest of these is at 77' compared with an overall tower height of 180'. The tower also provides reception for personal wireless devices that might be carried by law enforcement or emergency service personal including Fish and Game officers and search and rescue personnel that might be in remote areas where wireless coverage would otherwise be absent. The Dept. of Safety and DRED have issued a joint RFP for an independent technical review of requirements for public safety communications now being provided at Mount Kearsarge, in part to help determine if there are alternatives to the current tower. While most of the current generation of facilities has been build out for state police communications, needs will expand and refine in the future and the DOS could used a dedicated revenue source to better fund wireless communication needs.
- DRED policy on use of state owned mountain tops in its current form is an improvement over past practices. The policy is not adopted by rule. Consideration should be given to codifying the policy or adopting it by rule, including more planning for eventual mitigation of visual impacts and restoration of sites on key mountain tops such as Blue

Job Mountain and Mount Kearsarge, consistent with public safety communication needs. (Recommendation #11)

- The Dept. of Transportation has been planning for development of Intelligent Transportation Systems (ITS) which would entail extensive use of wireless and fiber optic systems in highway rights of way. They have recently issued a request for indications of interest from the private sector for shared resource agreements for development of telecommunication uses in state rights-of-way. Such agreements would need to allow for non-discriminatory access by competitive carriers to fiber optic and wireless facilities. They have some authority for licensing utility uses in pubic rights of way, but this could be clarified with regard to wireless. While they have had inquires from the industry about wireless facility possibilities, none have been formally proposed or approved to date. Opportunities may well exist for use of existing NHDOT facilities, such as sign structures and light poles, for PWSF antenna locations, was as well disguised or camouflaged locations that are less obtrusive than tall lattice towers. This area of public policy should be developed and refined as soon as possible to facilitate less visually intrusive alternatives to tall towers. This is part of recommendation # 9.
- Opportunities for disguised antenna locations may also exist in or on other state facilities such as state buildings and this should be addressed in legislation in conjunction with the Dept. of Administrative Services. (Recommendation #10)

III. Recommendations for Proposed Legislation:

The committee recommends that legislation be introduced addressing the following issues:

1) Authorize the NH Division of Historical Resources to charge "Section 106" telecommunications project review applicants an application fee, based on a sliding scale for the scope of the project and review, and for the cost of outside consultants necessary to review the application, if allowed under federal law and funding guidelines. If this is not allowed, and that appears to be the case at this time, then introduce a resolution calling upon Congress to either provide federal funding to pay for the cost of this federal mandate, sufficient to avoid delays in processing applications and detracting from other work; OR allow states to impose reasonable application fees.
2) Consider imposing an annual state fee on existing towers providing PWSF antenna sites, roughly in proportion to size or capacity, to supplement existing funding for the Office of State Planning and Div. of Historical Resources and help provide the resources for timely mapping and review of applications.
3) Direct all state agencies to submit any wireless telecommunications facility projects to the Division of Historical Resources for review, as if a private Section 106 review, and to take into account the recommendations of the Division with regard to mitigation or avoidance of adverse impacts on historic resources.
4) Authorize local land use boards (planning and zoning) to condition their review of wireless telecommunication facilities on a completion of NH Division of Historical

Resources Section 106 review and to deny or condition approval of a facility if the Division finds that there will be an adverse impact on a historic site.

5) If the Division finds that there will be an adverse impact on a National Historic Landmark or other buildings or locations on the National Register of Historic Places, give the host community of such a site abutter status in any land use review of a PWSF or telecommunications tower in another municipality hosting the PWSF or tower.

6) Grant municipalities authority to wave zoning requirements, without the findings necessary for a traditional variance, with regard to PWSFs in a situation where an alternative antenna mount or PWSF location would mitigate adverse impacts compared with a proposed location or mount that is otherwise permitted by local zoning.

7) Clarify the authority of municipalities without zoning ordinances to adopt a special purpose land use ordinance for the purpose of reasonable regulation of PWSF and wireless telecommunications towers.

8) Clarify the authority of municipalities without zoning ordinances or with inadequate regulations concerning wireless facilities to adopt a one time moratorium of up to 180 days to review and act on proposed regulations for siting of wireless telecommunication facilities (PWSFs and towers).

9) Amend RSA 228:31-a to expressly cover a wider variety of wireless communication and to allow the possibility of expedited approval of PWSF antenna mounts where there is minimal adverse visual impact, giving greatest preference to mounts on existing structures, next preference to camouflaged and disguised PWSFs, and possibly to monopoles in preference over lattice towers. The form of licenses or leases for such facilities might be approved by Governor and Council, but specific applications (at least for disguised or camouflaged mounts on existing structures) might be approvable by the Commissioner of Transportation.

10) Likewise, for the Department of Administrative Services, allow for disguised or camouflaged mounts on existing state buildings and structures, with the possibility of a demonstration project in the state capital dome.

11) Consider putting the DRED "Policy on Use and Management of Mountaintops for Communication Facilities" into rule and include a policy statement regarding ultimate mitigation of adverse visual impacts such as by removal or reduction in size of tower locations when and where technically, economically, and legally feasible without undue adverse impact on public safety communication needs.

A number of the committee members have indicated interest in filing legislation for 2001 to address the recommendations.

Respectively submitted,

Senator Clifton Below
Committee Chair

Speakers

ENERGY & ECONOMIC DEVELOPMENT COMMITTEE

Date 2-22-00 Time 3:20 PM Public Hearing on HB 733

Appearing in FAVOR: (Please print) Please check box at left to speak.

Speaking?	Name	Address	Representing
☑	~~Rep Bradley~~		
X ☒	REP. BELVIN (3 MIN.)	AMHERST, NH	HILLSB. 14
X ☒	Rep. Kaen 1 min	Lee, Nitt.	Strafford 7
X ☑	ANDREW BRIDGE	AMHERST NH	
☒	~~David R. Bastin~~	~~105 Rrae Burn Dr.~~	~~Manchester~~
X ☐	Chris Northrop	NH OSP Concord	(not intending to testify)
X ☒	REP. BRADLEY		CARR 8
☐			
☐			
☐			

Appearing in OPPOSITION: (Please Print) Please check box at left to speak.

X ☒	David R. Bastin	105 Rrae Burn Dr.	Manchester
X ☒	Curt Connors	Nextel Communications	
X ☐	Andrew Fills	Rural Cellular Corporation	
X ☒	DAN CALLAHAN	NEXTEL	
☐			
☐			
☐			
☐			
☐			
☐			

ENERGY & ECONOMIC DEVELOPMENT COMMITTEE

Date 2-22-00 Time 3:20PM Public Hearing on HB733

Appearing in FAVOR: (Please print) Please check box at left to speak.

Speaking?	Name	Address	Representing
X ☒	Patricia A. Novak	HC 66, Box 12A, Wilmot	self
X ☑	Mark Woodbury	4 New South Drive Amherst	Self
X ☑	Don Novak	HC 66 Box 12A, Wilmot	Self
X ☒	Bekie Bridge	19 Woodland Drive Amherst NH	Self
☐			
☐			
☐			
☐			
☐			
☐			

Appearing in OPPOSITION: (Please Print) Please check box at left to speak.

☐			
☐			
☐			
☐			
☐			
☐			
☐			
☐			
☐			
☐			

Testimony

Don Novak
HC 66 Box 12A
Wilmot, NH 03287
dnovak@sugar-river.net
603-526-4135

Testimony on HB 733

I support this bill but would like to see the wording regarding a **model ordinance** strengthened to **mandate** this action. I have recently been involved in crafting a wireless communication ordinance for the town of Wilmot, and I can speak from experience that a well crafted model ordinance would have made our job much easier. There are so few towns that have wireless ordinances, and the task to create one so difficult, that anything the State can do to encourage and facilitate the process should be a priority. Also, use of a model ordinance would benefit the telecommunication industry by providing more, uniform, ordinances state wide.

Last, I would encourage language specifying a **time line** so this model ordinance is available as quickly as possible.

[Click here and type address]

facsimile transmittal

To:	All Members of the Senate Energy and Economic Development Committee	**Fax:**	(603) 271-3027
From:	Andrew and Elizabeth Bridge	**Date**	05/14/00
Re:	HB-733 2000-4480s 10-04	**Pages:**	3 including this cover
CC:			

☐ UrgenT ☐ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

Attention Ms. Jillian Mason--Senate Energy and Economic Development Committee

Attached please find a letter for the members of the Energy and Economic Development Committee. We understand this bill is up for a vote on Tuesday Betsie and I would appreciate it very much if you could please distribute copies to the committee members.

Please contact us if you have any questions. Thank you for your kind help.

Best Regards

Andy and Betsie Bridge

19 Woodland Dr.

Amherst, NH 03031

(603) 673-5326

To the Honorable Members
Senate Energy and Economic Development Committee
Via Fax to (603) 271-3027
c/o Ms. Jillian Mason

May 13, 2000

Dear Senators:

We are writing to ask you to support of the amended version of HB 733, number 2000-4480s 10/04. It helps create the WIN-WIN situation under which we can make these new and exciting wireless services available to the citizens of New Hampshire, while at the same time protecting the scenic beauty that makes our state so special.

HB 733 is informative in nature. It is designed to provide local planning boards with information that they will find helpful in making decisions regarding the placement, construction, and modification of cellular towers or, more precisely, of personal wireless service facilities (PWSF's). We believe that the more information that a local land use board has available to it, the more educated a decision it can make.

Currently, most of the information that our local planning boards get about this issue comes from the wireless industry itself. HB 733 makes additional information available to our local boards in several ways.

First, it talks about commercially available alternatives to tall cellular towers and goes on to describe some of them. Many of our local towns don't know that commercially available alternatives to tall cellular towers exist. The bill then provides a set of definitions consistent with the governing federal law.

It also allows for input from citizens who live in towns that would be visually impacted by a facility, even if the proposed facility were to be built in a neighboring town. While it specifically does not give these citizens or adjoining towns any legal standing, they would be able to present information to the local decision making board on commercially available alternatives to tall cellular towers. The final decision as to whether or not to approve construction of a facility, however, would still rest solely with the town in which it is proposed.

The bill would also provide for the development of a map of PWSF's that could then be used for planning decisions regarding the co-location of antennas. This will allow for a more orderly and efficient deployment of wireless communication services within New Hampshire.

HB 733 also directs the Office of State Planning to compile a set of model ordinances relative to the deployment of PWSF's. This set shall include any model ordinances that the industry wishes to submit along with the PWSF's ordinance of the town of Amherst, NH and any other ordinances the Director of the OSP wishes to include.

This set of model ordinances would then be made available to any New Hampshire town that asked for it. The purpose of having a set of ordinances is to give our local boards as wide a range of examples of wireless telecommunication ordinances as possible. From this set a town may, if it wishes to, develop an ordinance to meet the needs and desires of its citizens.

Finally, HB 733 establishes a committee to study state wireless communications policy in order to gather additional information about this rapidly changing wireless revolution and to provide suggestions as to how the state might contribute to the WIN-WIN situation we are all striving to obtain.

With all of this new information available to them under HB 733, our local land use boards will be better prepared to create this WIN-WIN situation we envision occurring. A WIN-WIN situation that recognizes that the goals of providing the citizens of New Hampshire with the most modern and up to date personal wireless services and of protecting our natural and scenic beauty are not mutually exclusive. Under HB 733 we can all enjoy both.

Please support this bill.

Sincerely,

Andrew G. and Elizabeth A. Bridge
19 Woodland Dr.
Amherst, NH 03031

(603) 673-5326

e-mail bridge.amherst.tape@juno.com

Committee Report

Date: February 22, 2000 Time: 3:20 PM

The Senate Committee on Energy Economic Development held its hearing in Room 105-SH, Concord, New Hampshire.

BILL NO.: HB 733 TITLE: (New Title) relative to a state master plan for the deployment of personal wireless service facilities and establishing a committee to study state wireless communications policy.

Members of the Committee present:

Senator F. King
Senator Cohen
Senator Below
Senator Hollingworth
Senator Johnson
Senator Fraser

Those appearing in favor:

Name and Address	Representing
See Attached.	

Those appearing in opposition:

Name and Address	Representing
See Attached.	

REPORT OF THE COMMITTEE:

- ☐ Ought to Pass
- ☒ Ought to Pass w/ Amendment
- ☐ Inexpedient to Legislate
- ☐ Rereferred
- ☐ Interim Study
- ☐ Continued Hearing
- ☐ Postponed Hearing

STATE OF NEW HAMPSHIRE

SENATE

REPORT OF THE COMMITTEE

Date:

THE COMMITTEE ON Energy Economic Development

to which was referred House Bill 733

AN ACT relative to a state master plan for the deployment of personal wireless service facilities.

VOTE: 6-1

2000-4537s

Having considered the same, report the same with the following amendment and recommend that the bill: **AS AMENDED OUGHT TO PASS.**

Senator Clifton Below
For the Committee

|HB733 Docket

Next|Prev|Results List|Main|Bill Status

Bill Title: (New Title) relative to a state master plan for the deployment of personal wireless service facilities and establishing a committee to study state wireless communications policy.

Date	Body	Description
3/4/1999	H	Introduced and ref to Science, Tech & En; HJ29, p598
3/10/1999	H	Copy to Chairman on 3/10/1999
4/1/1999	H	==CANCELLED==Hearing Apr 14 10:00 Rm304,LOB
4/15/1999	H	Rescheduled Hearing May 4 10:00 Rm304,LOB
5/5/1999	H	Subcom work session May 18 10:00 Rm304,LOB
5/19/1999	H	Maj Report RE-REF for May 25 (vote 17-0;CC)
5/25/1999	H	Re-Referred to Science, Tech & En committee; HJ58, p1524
8/31/1999	H	Re-Ref Subcom work session Sep 7 1:00 RM304,LOB
9/7/1999	H	Re-Ref Subcom work session Sep 14 10:00 RM304,LOB
11/1/1999	H	RE-REF Maj Report OTP/AM for 1/6/2000 (vote 18-0; Reg)
11/1/1999	H	Prop Comm Am {2086}; HC93,p2296-2298
1/6/2000	H	Comm Am, AA 2/3VV; Passed with Am 2/3VV; HJ6, p184-186 + 188
1/13/2000	S	Introduced and Ref. to Energy and Economic Development ; SJ 1, Pg.36
2/16/2000	S	Hearing, Feb 22, Room 105 A, SH, 3:20 p.m.; SC12, Pg.8
5/17/2000	S	Committee Report ought to Pass with Amendment{4537}, 05/18/00; SC30
5/18/2000	S	Committee Report Ought to Pass with Amendment {4537},[New Title]; AA, VV; SJ 15, Pg.404-407
5/18/2000	S	Sen. Below offered a Floor amendment {4581}, AA, VV; OT3rdg.; MA, VV; SJ 15, Pg.407
5/18/2000	H	House Conc with Sen Am, Rep Bradley MA 2/3VV; HJ46, p1484
5/18/2000	H	Enrolled Am{4640}, Adopted; HJ46, p1498
5/18/2000	S	Enrolled Bill Am {4640}, Adopted ; SJ 15, Pg.530-531
5/31/2000	H	Enrolled; HJ48, p1537
5/31/2000	S	Enrolled Bill, Adopted ; SJ 16, Pg.536
6/8/2000	H	Signed by the Governor on 6/8/2000 Eff: 8/7/2000 Chap: 0240
7/7/2000	S	Study Committee Members: Senator Below, Larsen, Disnard, Cohen, Krueger. (for Ch. 240:2)

Next|Prev|Results List|Main|Bill Status

Docket Abbreviations