

Department of Legislative Services  
Maryland General Assembly  
1999 Session

FISCAL NOTE  
Revised

House Bill 1131 (Delegates C. Davis and Finifter)

Ways and Means

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Sales and Use Tax - Exemption for Digital Telecommunications Machinery and  
Equipment

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This bill exempts from the sales and use tax digital telecommunications machinery or equipment that enables a television or radio station to originate and broadcast, or receive and broadcast, digital signals and that has been purchased to comply with the federal Telecommunications Act of 1996. The exemption applies to all sales during the July 1, 1999 to December 31, 2007 period.

The bill takes effect July 1, 1999.

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Fiscal Summary

**State Effect:** Indeterminate but potentially significant decrease in general fund revenues. No effect on expenditures.

**Local Effect:** None.

**Small Business Effect:** Minimal.

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Fiscal Analysis

**State Effect:** The federal Telecommunications Act of 1996 adopted rules for the implementation of Digital Television (DTV) in the United States. All existing television stations are required to broadcast digital signals by a specified time. Four Baltimore television broadcasting stations are required to provide some on-air digital television by November 1, 1999. Of the remaining stations, six commercial stations are required to broadcast digital signals by May 2002 and the six Maryland Public Television (MPT) stations

are required to simulcast digital television by May 2003. Full use of the digital spectrum is to be implemented by 2006. In total, 16 Maryland television stations are required, pursuant to the Telecommunications Act, to purchase equipment and machinery that would enable them to receive or broadcast digital signals. Radio stations are not subject to the provisions of the Telecommunications Act.

Digital conversion for Maryland's six public television stations is projected to cost \$40 million over a six-year period (these public television stations are not subject to the sales tax).

These costs include production equipment as well as modification of existing towers and replacement of others. According to the Maryland D.C. Delaware Broadcasters' Association, the ten commercial television stations in Maryland are projected to spend about \$56 million over a seven-year period on equipment and machinery in order to broadcast and receive digital signals, with the cost spread somewhat evenly over the entire period. This estimate includes from \$1 million to \$2 million that would have been spent before July 1, 1999. Each station expects to spend between \$2 million and \$8 million for new equipment purchase. If the industry's estimates reflect actual expenditures, the State would experience a reduction in sales and use tax revenues of about \$2.7 million over a five-year period as a result of this bill.

The Department of Legislative Services advises, however, that the projections may not anticipate the full cost of digital conversion for the commercial stations. The industry's estimates are predicated on the following assumptions:

1. New towers would not have to be constructed to bear the load of the new digital equipment - existing towers could be modified or space on other towers could be leased.
2. Digital conversion for the larger stations will be phased-in over a period of seven years and the cost of existing technology will decline over time.
3. During the period for which the exemption is allowed (from 1999 to 2008), some television stations would be able to offer standard-definition rather than high-definition digital programming, thus existing studio equipment could be used and would not be replaced. High-definition programming offers higher resolution images; however, the cost of programming is also higher since new studio equipment would have to be purchased.
4. During the relevant sales tax exemption period, there would be no new significant innovations in digital programming technology. For instance, it assumes the current multiplexing technology (i.e., the ability to split the digital bandwidth to offer multiple channels) won't change over the relevant period. The current technology allows two channels (one standard-definition and one high-definition channel) or four to five channels each offering standard-definition programming.

If new towers have to be constructed, the cost of equipment purchase would increase. New towers

with new antennas could cost between \$3 million and \$4 million. Also, if the stations accelerate the phase-in of the digital conversion, the cost of equipment purchases would increase because the stations' estimates anticipate a decline in equipment prices over time. The cost of digital conversion would also largely depend on consumer demand for digital programming. For instance, some television stations intend to offer only standard-definition programming. If, however, market forces compel a station to produce high-definition programming, an anticipated cost of \$3.5 million for digital conversion for a single station could easily increase to \$10 million since existing studio equipment would have to be replaced. In addition, the cost could also increase if new technologies are developed. For instance, if the multiplexing technology is improved such that the bandwidth could accommodate more than one high-definition channel, equipment costs could increase not merely from the new technology that allows the additional features but also from the associated costs of high-definition programming. Although this technology currently isn't available, it could conceivably be developed during the relevant period.

Finally, although the federal Act does not require radio stations to offer digital programming, some radio stations will be affected, although indirectly, by the Act. This is because some radio stations currently share their analog equipment with television stations. If these television stations convert to digital signals, the radio stations would be displaced and would have to purchase new analog equipment (costing between \$175,000 and \$200,000). There are currently 75 radio stations in Maryland. The number of stations that would be displaced as a result of digital conversion for the television stations cannot be reliably estimated at this time. It is unclear if these radio stations qualify for the sales tax exemption.

Given the uncertainties associated with any new product or technology and for the reasons discussed above, it is estimated that general fund revenues as a result of the sales tax exemption would decrease by a minimum of \$2.7 million over a five-year period (fiscal 2000 to 2004). However, market pressures and technological changes could result in more equipment purchase for the affected stations, which could lead to general fund revenue losses of significantly more than \$2.7 million.

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**Information Source(s):** Federal Communications Commission, Maryland D.C. Delaware Broadcasters' Association, Comptroller of the Treasury (Bureau of Revenue Estimates), Department of Legislative Services

**Fiscal Note History:** First Reader - March 17, 1999  
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