"(1) The legal authority of Federal agencies and State and local governments in controlling land use and the limitations on such authority.

(2) The current practices of Federal agencies and State and local governments in addressing land use issues involving a pipeline easement.

(3) The most effective way to encourage Federal agencies and State and local governments to monitor and reduce encroachment upon pipeline rights-of-way.

"(d) REPORT.-

"(1) IN GENERAL.—Not later than 1 year after the date of enactment of this subsection, the Secretary shall publish a report identifying practices, laws, and ordinances that are most successful in addressing issues of encroachment and maintenance on pipeline rights-of-way so as to more effectively protect public safety, pipeline workers, and the environment.

"(2) DISTRIBUTION OF REPORT.—The Secretary shall provide a copy of the report to-

(A) Congress and appropriate Federal agencies; and "(B) States for further distribution to appropriate local

authorities.

"(3) Adoption of practices, laws, and ordinances.— The Secretary shall encourage Federal agencies and State and local governments to adopt and implement appropriate practices, laws, and ordinances, as identified in the report, to address the risks and hazards associated with encroachment upon pipeline rights-of-way and to address the potential methods of preserving environmental resources while maintaining pipeline rights-of-way, consistent with pipeline safety.".

(b) CONFORMING AMENDMENT.—The analysis for chapter 601 is amended by striking the item relating to section 60127 and inserting the following:

"60127. Population encroachment and rights-of-way.".

SEC. 12. PIPELINE INTEGRITY, SAFETY, AND RELIABILITY RESEARCH 49 USC 60101 AND DEVELOPMENT.

(a) IN GENERAL.—The heads of the participating agencies shall carry out a program of research, development, demonstration, and standardization to ensure the integrity of pipeline facilities.

(b) MEMORANDUM OF UNDERSTANDING.

(1) IN GENERAL.—Not later than 120 days after the date Deadline. of enactment of this Act, the heads of the participating agencies shall enter into a memorandum of understanding detailing their respective responsibilities in the program authorized by subsection (a).

(2) AREAS OF EXPERTISE.—Under the memorandum of understanding, each of the participating agencies shall have the primary responsibility for ensuring that the elements of the program within its expertise are implemented in accordance with this section. The Department of Transportation's responsibilities shall reflect its lead role in pipeline safety and expertise in pipeline inspection, integrity management, and damage prevention. The Department of Energy's responsibilities shall reflect its expertise in system reliability, low-volume gas leak detection, and surveillance technologies. The National Institute of Standards and Technology's responsibilities shall reflect its

note.

Deadline. Publication. expertise in materials research and assisting in the development of consensus technical standards, as that term is used in section 12(d)(4) of Public Law 104–13 (15 U.S.C. 272 note).

(c) PROGRAM ELEMENTS.—The program authorized by subsection (a) shall include research, development, demonstration, and standardization activities related to—

(1) materials inspection;

(2) stress and fracture analysis, detection of cracks, corrosion, abrasion, and other abnormalities inside pipelines that lead to pipeline failure, and development of new equipment or technologies that are inserted into pipelines to detect anomalies;

(3) internal inspection and leak detection technologies, including detection of leaks at very low volumes;

(4) methods of analyzing content of pipeline throughput;

(5) pipeline security, including improving the real-time surveillance of pipeline rights-of-way, developing tools for evaluating and enhancing pipeline security and infrastructure, reducing natural, technological, and terrorist threats, and protecting first response units and persons near an incident;

(6) risk assessment methodology, including vulnerability assessment and reduction of third-party damage;

(7) communication, control, and information systems surety;

(8) fire safety of pipelines;

(9) improved excavation, construction, and repair technologies; and

(10) other appropriate elements.

(d) PROGRAM PLAN.—

(1) IN GENERAL.—Not later than 1 year after the date of enactment of this section, the Secretary of Transportation, in coordination with the Secretary of Energy and the Director of the National Institute of Standards and Technology, shall prepare and transmit to Congress a 5-year program plan to guide activities under this section. Such program plan shall be submitted to the Technical Pipeline Safety Standards Committee and the Technical Hazardous Liquid Pipeline Safety Standards Committee for review, and the report to Congress shall include the comments of the committees. The 5-year program plan shall be based on the memorandum of understanding under subsection (b) and take into account related activities of other Federal agencies.

(2) CONSULTATION.—In preparing the program plan and selecting and prioritizing appropriate project proposals, the Secretary of Transportation shall consult with or seek the advice of appropriate representatives of the natural gas, crude oil, and petroleum product pipeline industries, utilities, manufacturers, institutions of higher learning, Federal agencies, pipeline research institutions, national laboratories, State pipeline safety officials, labor organizations, environmental organizations, pipeline safety advocates, and professional and technical societies.

(e) REPORTS TO CONGRESS.—Not later than 1 year after the date of enactment of this Act, and annually thereafter, the heads of the participating agencies shall transmit jointly to Congress a report on the status and results to date of the implementation of the program plan prepared under subsection (d).

Deadline.

Deadline.

(f) AUTHORIZATION OF APPROPRIATIONS.—

(1) DEPARTMENT OF TRANSPORTATION.—There is authorized to be appropriated to the Secretary of Transportation for carrying out this section \$10,000,000 for each of the fiscal years 2003 through 2006.

(2) DEPARTMENT OF ENERGY.—There is authorized to be appropriated to the Secretary of Energy for carrying out this section \$10,000,000 for each of the fiscal years 2003 through 2006.

(3) NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY.— There is authorized to be appropriated to the Director of the National Institute of Standards and Technology for carrying out this section \$5,000,000 for each of the fiscal years 2003 through 2006.

(4) GENERAL REVENUE FUNDING.—Any sums appropriated under this subsection shall be derived from general revenues and may not be derived from amounts collected under section 60301 of title 49, United States Code.

(g) PIPELINE INTEGRITY PROGRAM.—Of the amounts available in the Oil Spill Liability Trust Fund established by section 9509 of the Internal Revenue Code of 1986 (26 U.S.C. 9509), \$3,000,000 shall be transferred to the Secretary of Transportation, as provided in appropriation Acts, to carry out programs for detection, prevention, and mitigation of oil spills for each of the fiscal years 2003 through 2006.

(h) PARTICIPATING AGENCIES DEFINED.—In this section, the term "participating agencies" means the Department of Transportation, the Department of Energy, and the National Institute of Standards and Technology.

SEC. 13. PIPELINE QUALIFICATION PROGRAMS.

(a) VERIFICATION PROGRAM.—

(1) IN GENERAL.—Chapter 601 is further amended by adding at the end the following:

"§ 60131. Verification of pipeline qualification programs

"(a) IN GENERAL.—Subject to the requirements of this section, the Secretary of Transportation shall require the operator of a pipeline facility to develop and adopt a qualification program to ensure that the individuals who perform covered tasks are qualified to conduct such tasks.

"(b) STANDARDS AND CRITERIA.—

Deadline.

"(1) DEVELOPMENT.—Not later than 1 year after the date of enactment of this section, the Secretary shall ensure that the Department of Transportation has in place standards and criteria for qualification programs referred to in subsection (a).

"(2) CONTENTS.—The standards and criteria shall include the following:

"(A) The establishment of methods for evaluating the acceptability of the qualifications of individuals described in subsection (a).

"(B) A requirement that pipeline operators develop and implement written plans and procedures to qualify individuals described in subsection (a) to a level found acceptable using the methods established under subparagraph (A) and