WASHINGTON, July 24 — President Bush tried again today to generate momentum for immigration legislation, declaring at a naturalization ceremony that the United States could be “a lawful society and a welcoming society at the same time.”

“Congress is now considering legislation on immigration reform,” Mr. Bush said. “That legislation must be comprehensive. All elements of the problem must be addressed together, or none of them will be solved at all.”

The president spoke at a citizenship ceremony at Walter Reed Army Medical Center for three soldiers who were wounded in Iraq. “The three men we honor today have brought honor to America,” Mr. Bush said. “Like those who have come before, each of these men chose to protect our country because they love what America stands for.”

In calling on Congress to act, Mr. Bush was trying to bridge a wide gap between the Senate and House. Each chamber has passed an immigration bill, but the two versions are vastly different in intent and content. The Senate version would offer eventual citizenship for many illegal aliens, while the House version is far tougher and focuses on border security.

With Congressional elections approaching, there has been speculation that an immigration bill may not emerge from the full Congress this year. But Mr. Bush signaled today that he is not ready to give up.

The president, who much prefers the Senate version, said today that border security must be a paramount concern. But he added: “We must resolve the status of millions of illegal immigrants who are here already. We shouldn’t be granting people automatic citizenship, nor is it possible to kick people out of the country.”

Mr. Bush reiterated his support for a temporary-worker program for foreigners willing to do jobs that Americans will not do. He has said repeatedly that citizenship must not be automatic for illegal aliens, but that it should be attainable for those willing to pay penalties and wait their turn in line.

The soldiers who became citizens today are Specialist Lito Santos-Dilone of Brooklyn; Specialist Sergio Lopez of Bowlingbrook, Ill., and Private First Class Eduardo Leal-Cardenas of Los Angeles. All three were legal immigrants who benefited from an executive order signed by Mr. Bush after the Sept. 11 attacks, making noncitizens who serve on active duty in the United States military eligible for expedited naturalization proceedings.

“We are stronger and more dynamic when we welcome new citizens like these,” the president said today.