WASHINGTON—President Trump is expected to sign an order later Monday temporarily barring new immigrants on a slate of employment-based visas including the H-1B for high-skilled workers from coming to the U.S. amid the continuing coronavirus pandemic, a move his administration argues will safeguard jobs for unemployed Americans.

The new restrictions, which officials said are set to last until the end of the year, expand on a temporary immigration ban Mr. Trump introduced in April that blocked some family members of U.S. citizens and reduced the number of high-skilled workers from immigrating to the U.S. for the time being.

A senior administration official estimated the expanded travel restrictions will prevent about 525,000 people from entering the country between now and the end of the year, including 170,000 green-card holders who have been barred from coming to the U.S. since April. The senior official estimated the move will reallocate about 500,000 jobs to out-of-work Americans in what he described as an “America-first recovery.”

In addition to the H-1B visa, the temporary ban will apply to new H-2B visas for short-term seasonal workers in landscaping and other nonfarm jobs, J-1 visas for short-term workers including camp counselors and au pairs and L-1 visas for internal company transfers.

The new restrictions won’t apply to visa-holders already in the U.S., or those outside the country who have already been issued valid visas.

The restrictions are set to last beyond Oct. 1, the start of the government’s fiscal year, when new H-1B visas in particular tend to be issued.

The expanded ban follows sustained pressure from immigration hardliners, a key constituency of the president’s political base. For several months, they have demanded the administration take steps to limit the number of foreign workers coming to the country to ensure Americans get jobs first as the economy rebounds.
Mr. Trump issued the more limited set of restrictions in April two days after teasing a full immigration ban on Twitter in response to the coronavirus’s economic toll, a step panned both by immigration advocates for being unduly harsh and immigration hardliners for being too narrow.

A recent poll conducted by the Pew Research Center shows that a majority of Americans, about 64%, believe immigrants primarily fill jobs Americans don’t want.

“There’s no economic support for the idea that having more visa holders is going to increase the unemployment rate or prevent the unemployment rate from declining,” said Stuart Anderson, executive director of the National Foundation for American Policy, a nonpartisan think tank that studies trade and immigration issues.

Rumors of the temporary restrictions had been circulating for several weeks, prompting businesses—including tech companies and seasonal employers, along with colleges and universities—to publicly urge the administration to abandon its plans. The business groups say that barring immigrants who fill unique skill sets or take jobs most Americans won’t perform would hamper economic growth rather than bolster it.

In a May 27 letter addressed to Mr. Trump, nine Republican senators, including Sens. Lindsey Graham (R., S.C.) and John Cornyn (R., Texas) urged him to reconsider broad new restrictions on temporary work-visa programs, which the senators said would ultimately hurt U.S. businesses.

“American businesses that rely on help from these visa programs should not be forced to close without serious consideration,” they wrote. “Guest workers are needed to boost American business, not take American jobs.”