amendment I am offering is so important. In addition, I am happy to say, today we got a very strong editorial in the New York Times, which does not always write favorably about some things we have requested. But they have looked at this and have indicated this is something that should be done.

Let me take a minute to explain what we are asking for. Right after Katrina and Rita, the Congress, in its wisdom, said: Your situation is so bad down there, you have had so many houses destroyed, so many low-income houses destroyed, we are going to give you some extra low-income housing tax credits.

We normally get a formula of about \$2 per person in the country. Well, they gave us like \$18 per person in the country, which was wonderful. We needed the help. We needed those extra low-income housing tax credits to build housing for the very poor but also to build housing for the working middle class, people whom we rely on to help our hotels get started, our restaurants get started, our schools to run, our teachers, our firefighters, our police officers.

So the city and the region—this happened in New Orleans and lots of other parishes. It also happened along the gulf coast of Mississippi. Catholic Charities stepped to the plate, developers stepped to the plate and said: OK, we will use these low-income tax credits to build some housing.

Think about Haiti right now. Think about the scene you saw on CNN this morning. I was just looking at the scene. There is no plan. The rainy season is coming. One million people have no shelter. All they have are those sad old little blue tarps we had along the gulf coast. But Congress, in its wisdom, instead of keeping them in tents in the Mississippi gulf coast said: OK, hire, private sector. Here are some tax credits. Go out and build houses for these people as fast as you can.

So the developers, of course, had to scramble. We all had to scramble because it was very chaotic. But we put plans together and we decided how—it would take us some time, but we figured out how to build good housing, smart housing, not the same old terrible housing we had but new housing.

That is wonderful. That is the good part of the story. The bad part of the story is, we have run out of time. But it is not our fault we ran out of time. We worked as hard as we could. But as soon as we were ready to go to the market with these tax credits, what happens? The market collapses. So then our developers could not even get the tax credits.

The problem for us, which is a big problem, is that now if we do not have all these units, what they call, in service, by the end of this year, we are going to lose over 7,000 housing units. That is a lot. Not 70, not 700 but 7,000 all through the city of New Orleans, all through the gulf coast.

People—seniors, policemen, firefighters, teachers, workers in the restaurants—will have no place to live. Everybody says: Oh, LANDRIEU, there you are crying wolf again. I am not crying wolf. This is going to happen. So that is why this amendment—I have been asking for it for a year. The team has been very supportive, but it is not in the bill.

So I am on the floor to shake the bells, rattle a little bit, to say: Please consider this amendment. We are not asking for any new credits. We are not asking for any special credits. We do not—well, we need some new credits, but we are not asking for new credits. We just need to have the credits we have that have already been put into place. We cannot lose them.

This amendment is going to cost about \$300 million. It has a cost to it. I am asking the Finance Committee to please see how we can pay for this. It is an emergency, but I understand we want to try to pay for things as we go on, things such as this. So I am asking the Finance Committee to think about how this can be paid for.

But, again, I submit, in conclusion, the letter from the administration supporting it, the letter from Secretary Donovan, the editorial we got in the New York Times, the articles I am going to submit from our newspapers that clearly say this is important.

I thank the Members of this body for at least considering this amendment. I thank Senator Cochran, Senator Wicker, and Senator Vitter for joining in a bipartisan way to ask for it. I most certainly hope we can get this done because if not we are going to shut down these projects that are underway, we will lose 13,000 jobs, as well as lose the opportunity for over 7,000 families on the gulf coast to get good, affordable housing.

That is our argument, and I do not think there is any opposition. I hope not. Because it would be very important for us to get this amendment on this bill.

Mr. President, if there is no one here to speak, I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

Mr. KAUFMAN. Madam President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER (Mrs. HAGAN). Without objection, it is so ordered.

Mr. KAUFMAN. Madam President, I ask unanimous consent to speak in morning business for up to 20 minutes.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. KAUFMAN. Thank you, Madam President.

HIGH-FREQUENCY TRADING

Mr. KAUFMAN. Madam President, I have spoken on the Senate floor many times about the importance of transparency in our markets. Without transparency in our markets.

parency, there is little hope for effective regulation. And without effective regulation, the very credibility of our markets is threatened.

But I am concerned that recent changes in our markets have outpaced regulatory understanding and, accordingly, pose a threat to the stability and credibility of our equities markets. Chief among these is high-frequency trading.

Over the past few years, the daily volume of stocks trading in microseconds—the hallmark of high-frequency trading—has exploded from 30 percent to 70 percent of the U.S. market. In the past few years, this trading has exploded from 30 percent to 70 percent of the entire U.S. trading market.

Money and talent are surging into a high-frequency trading industry that is red hot, expanding daily into other financial markets not just in the United States but in global capital markets as well.

High-frequency trading strategies are pervasive on today's Wall Street, which is fixated on short-term trading profits. Thus far, our regulators have been unable to shed much light on these opaque and dark markets, in part because of their limited understanding of the various types of high-frequency trading strategies. Needless to say, I am very worried about that.

Last year, I felt a little lonely raising these concerns. But this year, I am starting to have plenty of company.

On January 13, the Securities and Exchange Commission issued a 74-page Concept Release to solicit comments on a wide range of market structure issues. The document raised a number of important questions about the current state of our equities markets, including:

Does implementation of a specific [high-frequency trading] strategy benefit or harm market structure performance and the interests of long-term investors?

The SEC also called attention to trading strategies that are potentially manipulative, including momentum ignition strategies in which "the proprietary firm may initiate a series of orders and trades (along with perhaps spreading false rumors in the marketplace) in an attempt to ignite a rapid price move either up or down."

The SEC went on to ask:

Does . . . the speed of trading and ability to generate a large amount of orders across multiple trading centers render this type of a strategy more of a problem today?

The SEC raised many critical questions in its concept release, and I appreciate that the SEC is going to undertake a baseline review.

As its comment period moves forward, I am pleased to report that other regulators and market participants, both at home and abroad, have taken notice of the global equity markets' recent changes, including the rise in high frequency trading.

In the United States, the Federal Reserve Bank of Chicago, in the March 2010 issue of its Chicago Fed Letter, argued that the rise of high-frequency

trading constitutes a systemic risk, asserting:

The high frequency trading environment has the potential to generate errors and losses at a speed and magnitude far greater than that in a floor or screen-based trading environment.

In other words, high-frequency trading firms are currently locked in a technological arms race that may result in some big disasters.

Citing a number of instances in which trading errors occurred, the Chicago Fed stated:

A major issue for regulators and policy-makers is the extent to which high frequency trading, unfiltered sponsor access and co-location amplify risks, including systemic risk, by increasing the speed at which trading errors or fraudulent trades can occur

Moreover, the letter cautions about the potential for future high-frequency trading errors arguing:

Although algorithmic trading errors have occurred, we likely have not yet seen the full breadth, magnitude, and speed with which they can be generated.

There is action internationally as well. On February 4, Great Britain's Financial Services Secretary, Paul Myners, announced that the British regulators were also conducting an ongoing examination of high-frequency trading practices, stating:

People are coming to me, both market users and intermediaries, saying that they have concerns about high frequency trading.

These developments come on the heels of another British effort targeting so-called "spoofing" "layering" strategies in which traders feign interest in buying or selling stock in order to manipulate its price. In order to deter such trading practices, the Financial Services Authority, FSA, announced that it would fine or suspend participants who engage in market manipulation. Noting that some market participants may not be sure that spoofing or layering is wrong. the FSA spokesman said: "This is to clarify that it is."

In Australia, market participants are also requesting clearer definitions of market manipulation, particularly with regard to momentum strategies such as spoofing. In a review of algorithmic trading published on February 8, the Australian Securities Exchange called on its regulators to "ensure that . . . market manipulation provisions . . . are adequately drafted to capture contemporary forms of trading and provide a more granular definition of market manipulation."

It is critical our regulators understand the risks posed by high-frequency trading both in terms of manipulation and at a systemic level. As the Chicago Fed stated, the threat of an algorithmic trading error wreaking havoc on our equities markets is only magnified by so-called "naked" or unfiltered sponsored access arrangements, which allow traders to interact on markets directly—without being subject to standard pretrade filters or risk controls.

Robert Colby, the former Deputy Director of the FEC's Division of Trading and Markets, warned last September that naked access leaves the marketplace vulnerable to faulty algorithms. In a speech given at a forum on the future of high-frequency trading, which was cited by the Chicago Federal Reserve's recent letter, Mr. Colby stated that hundreds of thousands of trades representing billions of dollars could occur in the 2 minutes it could take for a broker-dealer to cancel an erroneous order executed through naked access.

According to a report released December 14 by the research firm Aite Group, naked access now accounts for a staggering 38 percent of the market's average daily volume compared to only 9 percent—compared to 9 percent—only 4 years ago. That means in just 4 years, what has been determined to be a risky enterprise has increased from 9 percent of the market's average daily volume to 38 percent. That is almost 40 percent of the market's volume being executed by high-frequency traders interacting directly on exchanges without being subject to any pretrade risk monitoring.

In January, the SEC acted to address this ominous trend by proposing mandatory pretrade risk checks for those participating in sponsored access arrangements. This move would essentially eliminate naked access, and I applaud the SEC for its proposal.

While I am pleased that the SEC has taken on naked access and has issued a concept release on market structure issues, there is much more work that still needs to be done in order to gain a better understanding of high-frequency trading strategies and the risks of front running and manipulation they may create. In the last few months, several industry studies aimed at defining the benefits and drawbacks of highfrequency trading have emerged. While these studies may not be the equivalent of a peer-reviewed academic study, they do have the credibility of realworld market experts, and they begin to shed light on the opaque and largely unregulated. high-frequency trading strategies that dominate today's mar-

In addition to the Aite Group study, reports by the research group, Quantitative Services Group, QSG; the investment banking firm, Jefferies Company; the dark pool operator, Investment Technology Group, ITG; and the institutional brokerage firm, Themis Trading, all raise troubling concerns about the costs of high-frequency trading to investors and reinforce the need for enhanced regulatory oversight of these trading practices.

Last November, QSG analyzed the degree to which orders placed by institutional investors are vulnerable to high-frequency predatory traders who sniff out large orders and trade ahead of them. Specifically, the study concluded that splitting large orders into several smaller ones not only enhances the risk of unfavorable changes in price

but also increases "the chances of leaving a statistical footprint that can be exploited by the 'tape reading' HFT algorithms."

While traders have long tried to trade ahead of large institutional orders, they now have the technology and models to make an exact science out of it.

In a study put forth on November 3, the Jefferies Company examined the advantages high-frequency traders gain by colocating their computer servers next to exchanges and subscribing directly to market data feeds.

Jefferies estimates that these advantages afford high-frequency traders a 100- to 200-millisecond advantage over those relying on standard data providers. As a result, Jefferies concludes, high-frequency traders enjoy "almost risk-free arbitrage opportunities."

A Themis Trading white paper released in December elaborated on Jefferies' conclusion, noting that the combination of speed and informational advantages allow high-frequency traders to "know with near certainty what the market will be milliseconds ahead of everybody else."

The studies and papers I have mentioned underscore the need for the Securities and Exchange Commission to implement stricter recording and disclosure requirements for high-frequency traders under a large trader authority, as Chairman Mary Schapiro promised in a letter to me on December 3. We need—and we need now—tagging of high-frequency trading orders and next-day disclosure to the regulators, and we need them now.

For investors to have confidence in the credibility of our markets—and that is absolutely key. America is great because of the credibility of our markets. If we don't have credible markets, we are in deep trouble. It is one of the things that makes America great and unique. For investors to have confidence in the credibility of our markets, regulators must vigorously pursue a robust framework that maintains strong, fair, and transparent markets.

I would make five points along these lines.

First, the regulators must get back in the business of providing guidance to market participants on acceptable trading practices and strategies. While the formal rulemaking process is a critical component of any robust regulatory framework, so, too, are timely guidelines that bring clarity and stability to the marketplace.

Colocation, flash orders, and naked access are just a few practices that seem to have entered the market and have become fairly widespread before being subject to regulatory scrutiny. For our markets to be credible—and it is essential that they remain credible—it is vital that regulators be proactive—rather be reactive, when future developments arise.

Second, the SEC must gain a better understanding of current trading strategies by using its "large trader" authority to gather data on high-frequency trading activity. Just as importantly, this data, once masked, should be made available to the public for others to analyze.

I am concerned that academics and other independent market analysts do not have access to the data they need to conduct empirical studies on the questions raised by the SEC in its concept release. Absent such data, the ongoing market structure review predictably will receive mainly self-serving comments from high-frequency traders themselves and from other market participants who compete for high-frequency volume and market share.

Evidence-based rulemaking should not be a one-way ratchet because all the "evidence" is provided by those whom the SEC is charged with regulating. We need the SEC to require tagging and disclosure of high-frequency trades so that objective and independent analysts—at FINRA, in academia, or elsewhere—are given the opportunity to study and discern what effects high-frequency trading strategies have on long-term investors. They can also help determine which strategies should be considered manipulative.

Third, regulators must better define manipulative activity and provide clear guidance for traders to follow just as Britain's regulators have done in the area of scrutiny. By providing rules of the road, regulators can create a system better able to prevent and prosecute manipulative activity.

Fourth, the SEC must continue to make reducing systemic and operational risk a top regulatory priority. The SEC's proposal on naked access is a good first step, but exchanges must also be directed to impose universal pretrade risk tests. If that is solely in the hands of individual broker-dealers, a race to the bottom might ensue. We simply must have a level playing field when it comes to risk management that protects our equities markets from fat fingers or faulty algorithms. Regulators must therefore ensure that firms have proprietary operational risk controls to minimize the incidence and magnitude of any such errors while also preventing a tidal wave of copycat strategies from potentially wreaking havoc on our equity markets.

Fifth, the SEC should act to address the burgeoning number of order cancellations on the equities markets. While cancellations are not inherently bad—they can in fact enhance liquidity by affording automated traders greater flexibility when posting quotes—their use in today's marketplace, however, is clearly accessible and virtually a prima facie case that battles between competing algorithms, which use cancelled orders as feints and indications of misdirection, and have become all too commonplace, overloading the system and regulators alike.

According to the high-frequency trading firm T3Live, on a recent trad-

ing day only a little more than 1 billion of the over 89 billion orders on NASDAQ's book were ever executed, meaning a whopping 99 percent of total bids and offers were not filled. Cancellations by high-frequency traders, according to T3Live, are responsible for the bulk of these unfilled orders.

The high-frequency traders that create such massive cancellation rates might cause market data costs for investments to rise, make the price discovery process less efficient, and complicate the regulator's understanding of continuously evolving trading strategies. What is more, some manipulative strategies, including layering, rely on the ability to rapidly cancel orders in order to profit from changes in price.

Perhaps excessive cancellation rates should carry a charge. If traders exceed a specified ratio of cancellations to orders, it is only fair that they pay a fee. The ratio could be set high enough so that it would not affect long-term investors or even day traders and should apply to all trading platforms, including dark pools and ATSs, as well as exchanges.

The high-frequency traders who rely on massive cancellations are using up more bandwidth and putting more stress on the data centers. Attempts to reign in cancellations or impose charges are not without precedent. In fact they have already been implemented in derivatives markets where overall volume is a small fraction of the volume in cash market for stocks. The Chicago Mercantile Exchange's volume ratio test and the London International Financial Futures and Options Exchange's bandwidth usage policy both represent attempts to reign in excessive cancellations and might provide a helpful model for regulators wishing to do the same.

Finally, the high frequency trading industry must come to the table and play a constructive role in resolving current issues in the marketplace, including preventing manipulation and managing risk. In order to maintain fair and transparent markets and avoid unintended consequences, market participants from across the industry must contribute to the regulatory process. I am pleased that a number of responsible firms are stepping forward in a constructive way, both in educating the SEC and me and my staff. I look forward to continue to working with these industry players.

We all must work together, in the interests of liquidity, efficiency, transparency and fairness to ensure our markets are the strongest and best-regulated in the world. But we cannot have one with the other—for markets to be strong, they must be well-regulated. So with this reality in mind, I look forward to working with my colleagues, regulatory agencies, and people from across the financial industry to ensure our markets are free, credible and the envy of the world.

Madam President, I ask unanimous consent that links to some of the stud-

ies I have mentioned be printed in the RECORD.

There being no objection, the following material was ordered to be printed in the RECORD, as follows:

www.qsg.com

"Liquidity Charge® & Price Reversals: Is High Frequency Trading Adding Insult to Injury?" February 11, 2010

"Beware of the VWAP Trap," November 11,

http://www.themistrading.com/article_files/0000/0519/THEMIS_TRADING_White_Paper_Latency_Arbitrage_December_4_2009.pdf http://www.itg.com/news_events/ papers_AdverseSelectionDarkPools_113009F.pdf

I yield the floor and suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

Ms. MIKULSKI. Madam President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

UNEMPLOYMENT RELIEF

Ms. MIKULSKI. Madam President, I come to the floor of the Senate to say to my colleague from Kentucky: Let the unemployment bill go. Let's free the unemployment compensation bill, the bill that will fund COBRA health insurance benefits and put people back to work building highways, and let's pay doctors the fees they deserve for saving lives and improving lives. Of all of the bills in the United States of America, why are we holding up this one? I think it is outrageous, and I think it is egregious.

My Lord, look at this. Right now in the United States of America, 400,000 American citizens are not receiving their unemployment benefits. They have been laid off. They have been pushed around. They have been pushed out. And now the Senate will not act to extend their benefits.

Then there are the health insurance benefits called COBRA, and 500,000 Americans are not getting that. Who gets COBRA benefits? No, it is not a snake—although there are a lot of snakes around. It means that if you were laid off from a company, you have the opportunity to, with your own money out of your own pocket, be able to buy insurance and get a modest subsidy to help you through this. My gosh, why can't we do this?

Then there are the thousands of doctors who are not being paid. There are the highway people who are not being paid.

I gave you national statistics, but I am a Senator from Maryland. I want you to know that tonight there are 4,700 unemployed workers in my State who are not going to get their unemployment benefits—4,700 unemployed workers. That is money they could use to provide their families with a safety net for food, housing, heat, and for the expenses and activities of daily living.