February 22, 2018

The Honorable Elijah E. Cummings
Ranking Member
Committee on Oversight and Government Reform
U.S. House of Representatives
2471 Rayburn House Office Building
Washington, D.C. 20515

Dear Congressman Cummings:

On January 9, 2018, the Government Accountability Office (GAO) publicly released a report entitled *FCC Should Improve Monitoring of Industry Efforts to Strengthen Wireless Network Resiliency*, GAO 18-198 (Wireless Resiliency Report).[1] GAO was asked to examine federal efforts to ensure the resiliency of wireless networks following natural disasters and other physical incidents. The Wireless Resiliency Report examines: (1) trends in mobile wireless outages reported to the FCC since 2009 and (2) actions federal agencies and industry have taken since 2013 (after Hurricane Sandy) to improve wireless network resiliency, among other objectives. GAO also assessed the FCC's efforts to monitor an industry initiative, the Wireless Resiliency Cooperative Framework (Framework), to improve wireless network resiliency against federal internal control standards.

The Wireless Resiliency Report recommends that the Commission continue its work with industry "to develop specific and measurable objectives" for the Commission's Framework, including such outputs to measure the extent of the Framework's use.[2] In a December 1, 2017 response to a draft of the Wireless Resiliency Report, the Chief of the Commission's Public Safety and Homeland Security Bureau (Bureau) noted that the voluntary Framework is based on cooperation with wireless telecommunications providers, and agreed with GAO's recommendation.[3] Commission staff is undertaking to work with the Framework's signatories, as well as other industry stakeholders, to evaluate whether there are measureable objectives that accurately reflect the extent of the Framework's use. I anticipate this outreach will result in the development of measurable outputs that will provide the Commission with practical information on the usefulness of the Framework.

The Wireless Resiliency Report also recommends that the Commission "develop a plan to monitor the outputs and outcomes of the Wireless Network Resiliency Cooperative Framework and document the results of its monitoring to evaluate its effectiveness and identify whether changes are needed."[4] I will ensure that FCC staff has developed a structured plan to monitor and evaluate the Framework's impact on wireless network resiliency. We will then work with industry and other affected stakeholders to identify areas for improvement and determine how the Framework may be adjusted to better improve wireless network resiliency.

---

[1] GAO, FCC Should Improve Monitoring of Industry Efforts to Strengthen Wireless Network Resiliency, GAO 18-198, available at https://www.gao.gov/products/GAO-18-198.
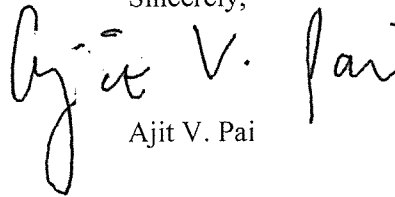
[2] *Id.* at 36.

[3] *Id.* at 53.

[4] *Id.*

I also agree with the Wireless Resiliency Report's recommendation that the Commission "should promote awareness about the elements of and any outcomes from the Wireless Network Resiliency Cooperative Framework among state and local public safety officials and other industry stakeholders, such as through existing outreach mechanisms and government-industry forums."[5] As the Bureau Chief noted in her response to GAO, we will leverage our existing methods of regularly sharing information with relevant state, local public safety and other industry stakeholders to promote greater awareness of the Framework's elements and outcomes.[6] We will also rely on our existing participation in the Federal Emergency Management Agency's ten Regional Emergency Communications Coordination Working Groups, which include emergency response organizations from federal, state, tribal, and local governments, nongovernmental organizations, and private sector entities, to further this awareness.[7]

I appreciate GAO's thorough analysis and recommendations. Thank you for the opportunity to respond to the Wireless Resiliency Report, and I look forward to discussing this issue with you further if you have any questions.

Sincerely,

Ajit V. Pai

---

[5] *Id.* at 36.

[6] *Id.* at 53.

[7] *Id.*

OFFICE OF
THE CHAIRMAN

February 22, 2018

The Honorable Trey Gowdy
Chairman
Committee on Oversight and Government Reform
U.S. House of Representatives
2157 Rayburn House Office Building
Washington, D.C. 20515

Dear Chairman Gowdy:

On January 9, 2018, the Government Accountability Office (GAO) publicly released a report entitled *FCC Should Improve Monitoring of Industry Efforts to Strengthen Wireless Network Resiliency,* GAO 18-198 (Wireless Resiliency Report).[1] GAO was asked to examine federal efforts to ensure the resiliency of wireless networks following natural disasters and other physical incidents. The Wireless Resiliency Report examines: (1) trends in mobile wireless outages reported to the FCC since 2009 and (2) actions federal agencies and industry have taken since 2013 (after Hurricane Sandy) to improve wireless network resiliency, among other objectives. GAO also assessed the FCC's efforts to monitor an industry initiative, the Wireless Resiliency Cooperative Framework (Framework), to improve wireless network resiliency against federal internal control standards.

The Wireless Resiliency Report recommends that the Commission continue its work with industry "to develop specific and measurable objectives" for the Commission's Framework, including such outputs to measure the extent of the Framework's use.[2] In a December 1, 2017 response to a draft of the Wireless Resiliency Report, the Chief of the Commission's Public Safety and Homeland Security Bureau (Bureau) noted that the voluntary Framework is based on cooperation with wireless telecommunications providers, and agreed with GAO's recommendation.[3] Commission staff is undertaking to work with the Framework's signatories, as well as other industry stakeholders, to evaluate whether there are measureable objectives that accurately reflect the extent of the Framework's use. I anticipate this outreach will result in the development of measurable outputs that will provide the Commission with practical information on the usefulness of the Framework.

The Wireless Resiliency Report also recommends that the Commission "develop a plan to monitor the outputs and outcomes of the Wireless Network Resiliency Cooperative Framework and document the results of its monitoring to evaluate its effectiveness and identify whether changes are needed."[4] I will ensure that FCC staff has developed a structured plan to monitor and evaluate the Framework's impact on wireless network resiliency. We will then work with industry and other affected stakeholders to identify areas for improvement and determine how the Framework may be adjusted to better improve wireless network resiliency.

---

[1] GAO, FCC Should Improve Monitoring of Industry Efforts to Strengthen Wireless Network Resiliency, GAO 18-198, available at https://www.gao.gov/products/GAO-18-198.
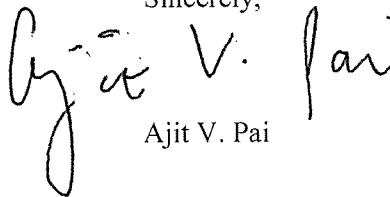
[2] *Id.* at 36.

[3] *Id.* at 53.

[4] *Id.*

I also agree with the Wireless Resiliency Report's recommendation that the Commission "should promote awareness about the elements of and any outcomes from the Wireless Network Resiliency Cooperative Framework among state and local public safety officials and other industry stakeholders, such as through existing outreach mechanisms and government-industry forums."[5] As the Bureau Chief noted in her response to GAO, we will leverage our existing methods of regularly sharing information with relevant state, local public safety and other industry stakeholders to promote greater awareness of the Framework's elements and outcomes.[6] We will also rely on our existing participation in the Federal Emergency Management Agency's ten Regional Emergency Communications Coordination Working Groups, which include emergency response organizations from federal, state, tribal, and local governments, nongovernmental organizations, and private sector entities, to further this awareness.[7]

I appreciate GAO's thorough analysis and recommendations. Thank you for the opportunity to respond to the Wireless Resiliency Report, and I look forward to discussing this issue with you further if you have any questions.

Sincerely,

Ajit V. Pai

---

[5] *Id.* at 36.

[6] *Id.* at 53.

[7] *Id.*

OFFICE OF
THE CHAIRMAN

February 22, 2018

The Honorable Claire McCaskill
Ranking Member
Committee on Homeland Security and Governmental Affairs
United States Senate
442 Hart Senate Office Building
Washington, D.C. 20510

Dear Congresswoman McCaskill:

On January 9, 2018, the Government Accountability Office (GAO) publicly released a report entitled *FCC Should Improve Monitoring of Industry Efforts to Strengthen Wireless Network Resiliency*, GAO 18-198 (Wireless Resiliency Report).[1] GAO was asked to examine federal efforts to ensure the resiliency of wireless networks following natural disasters and other physical incidents. The Wireless Resiliency Report examines: (1) trends in mobile wireless outages reported to the FCC since 2009 and (2) actions federal agencies and industry have taken since 2013 (after Hurricane Sandy) to improve wireless network resiliency, among other objectives. GAO also assessed the FCC's efforts to monitor an industry initiative, the Wireless Resiliency Cooperative Framework (Framework), to improve wireless network resiliency against federal internal control standards.

The Wireless Resiliency Report recommends that the Commission continue its work with industry "to develop specific and measurable objectives" for the Commission's Framework, including such outputs to measure the extent of the Framework's use.[2] In a December 1, 2017 response to a draft of the Wireless Resiliency Report, the Chief of the Commission's Public Safety and Homeland Security Bureau (Bureau) noted that the voluntary Framework is based on cooperation with wireless telecommunications providers, and agreed with GAO's recommendation.[3] Commission staff is undertaking to work with the Framework's signatories, as well as other industry stakeholders, to evaluate whether there are measureable objectives that accurately reflect the extent of the Framework's use. I anticipate this outreach will result in the development of measurable outputs that will provide the Commission with practical information on the usefulness of the Framework.

The Wireless Resiliency Report also recommends that the Commission "develop a plan to monitor the outputs and outcomes of the Wireless Network Resiliency Cooperative Framework and document the results of its monitoring to evaluate its effectiveness and identify whether changes are needed."[4] I will ensure that FCC staff has developed a structured plan to monitor and evaluate the Framework's impact on wireless network resiliency. We will then work with industry and other affected stakeholders to identify areas for improvement and determine how the Framework may be adjusted to better improve wireless network resiliency.

---

[1] GAO, FCC Should Improve Monitoring of Industry Efforts to Strengthen Wireless Network Resiliency, GAO 18-198, available at https://www.gao.gov/products/GAO-18-198.
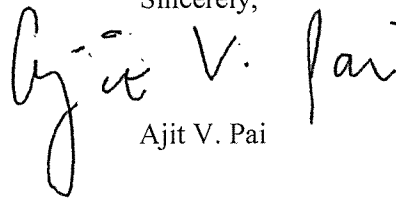
[2] *Id.* at 36.

[3] *Id.* at 53.

[4] *Id.*

I also agree with the Wireless Resiliency Report's recommendation that the Commission "should promote awareness about the elements of and any outcomes from the Wireless Network Resiliency Cooperative Framework among state and local public safety officials and other industry stakeholders, such as through existing outreach mechanisms and government-industry forums."[5] As the Bureau Chief noted in her response to GAO, we will leverage our existing methods of regularly sharing information with relevant state, local public safety and other industry stakeholders to promote greater awareness of the Framework's elements and outcomes.[6] We will also rely on our existing participation in the Federal Emergency Management Agency's ten Regional Emergency Communications Coordination Working Groups, which include emergency response organizations from federal, state, tribal, and local governments, nongovernmental organizations, and private sector entities, to further this awareness.[7]

I appreciate GAO's thorough analysis and recommendations. Thank you for the opportunity to respond to the Wireless Resiliency Report, and I look forward to discussing this issue with you further if you have any questions.

Sincerely,

Ajit V. Pai

---

[5] *Id.* at 36.

[6] *Id.* at 53.

[7] *Id.*

February 22, 2018

The Honorable Frank Pallone
Ranking Member
Committee on Energy and Commerce
U.S. House of Representatives
2322A Rayburn House Office Building
Washington, D.C. 20515

Dear Congressman Pallone:

On January 9, 2018, the Government Accountability Office (GAO) publicly released a report entitled *FCC Should Improve Monitoring of Industry Efforts to Strengthen Wireless Network Resiliency*, GAO 18-198 (Wireless Resiliency Report).[1] GAO was asked to examine federal efforts to ensure the resiliency of wireless networks following natural disasters and other physical incidents. The Wireless Resiliency Report examines: (1) trends in mobile wireless outages reported to the FCC since 2009 and (2) actions federal agencies and industry have taken since 2013 (after Hurricane Sandy) to improve wireless network resiliency, among other objectives. GAO also assessed the FCC's efforts to monitor an industry initiative, the Wireless Resiliency Cooperative Framework (Framework), to improve wireless network resiliency against federal internal control standards.

The Wireless Resiliency Report recommends that the Commission continue its work with industry "to develop specific and measurable objectives" for the Commission's Framework, including such outputs to measure the extent of the Framework's use.[2] In a December 1, 2017 response to a draft of the Wireless Resiliency Report, the Chief of the Commission's Public Safety and Homeland Security Bureau (Bureau) noted that the voluntary Framework is based on cooperation with wireless telecommunications providers, and agreed with GAO's recommendation.[3] Commission staff is undertaking to work with the Framework's signatories, as well as other industry stakeholders, to evaluate whether there are measureable objectives that accurately reflect the extent of the Framework's use. I anticipate this outreach will result in the development of measurable outputs that will provide the Commission with practical information on the usefulness of the Framework.

The Wireless Resiliency Report also recommends that the Commission "develop a plan to monitor the outputs and outcomes of the Wireless Network Resiliency Cooperative Framework and document the results of its monitoring to evaluate its effectiveness and identify whether changes are needed."[4] I will ensure that FCC staff has developed a structured plan to monitor and evaluate the Framework's impact on wireless network resiliency. We will then work with industry and other affected stakeholders to identify areas for improvement and determine how the Framework may be adjusted to better improve wireless network resiliency.

---

[1] GAO, FCC Should Improve Monitoring of Industry Efforts to Strengthen Wireless Network Resiliency, GAO 18-198, available at https://www.gao.gov/products/GAO-18-198.
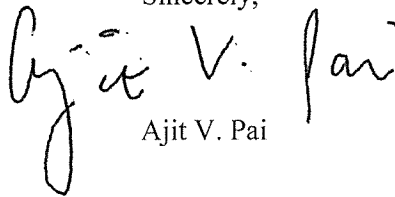
[2] *Id.* at 36.

[3] *Id.* at 53.

[4] *Id.*

I also agree with the Wireless Resiliency Report's recommendation that the Commission "should promote awareness about the elements of and any outcomes from the Wireless Network Resiliency Cooperative Framework among state and local public safety officials and other industry stakeholders, such as through existing outreach mechanisms and government-industry forums."[5] As the Bureau Chief noted in her response to GAO, we will leverage our existing methods of regularly sharing information with relevant state, local public safety and other industry stakeholders to promote greater awareness of the Framework's elements and outcomes.[6] We will also rely on our existing participation in the Federal Emergency Management Agency's ten Regional Emergency Communications Coordination Working Groups, which include emergency response organizations from federal, state, tribal, and local governments, nongovernmental organizations, and private sector entities, to further this awareness.[7]

I appreciate GAO's thorough analysis and recommendations. Thank you for the opportunity to respond to the Wireless Resiliency Report, and I look forward to discussing this issue with you further if you have any questions.

Sincerely,

Ajit V. Pai

---

[5] *Id.* at 36.

[6] *Id.* at 53.

[7] *Id.*

OFFICE OF
THE CHAIRMAN

February 22, 2018

The Honorable Greg Walden
Chairman
Committee on Energy and Commerce
U.S. House of Representatives
2125 Rayburn House Office Building
Washington, D.C. 20515

Dear Chairman Walden:

On January 9, 2018, the Government Accountability Office (GAO) publicly released a report entitled *FCC Should Improve Monitoring of Industry Efforts to Strengthen Wireless Network Resiliency*, GAO 18-198 (Wireless Resiliency Report).[1] GAO was asked to examine federal efforts to ensure the resiliency of wireless networks following natural disasters and other physical incidents. The Wireless Resiliency Report examines: (1) trends in mobile wireless outages reported to the FCC since 2009 and (2) actions federal agencies and industry have taken since 2013 (after Hurricane Sandy) to improve wireless network resiliency, among other objectives. GAO also assessed the FCC's efforts to monitor an industry initiative, the Wireless Resiliency Cooperative Framework (Framework), to improve wireless network resiliency against federal internal control standards.

The Wireless Resiliency Report recommends that the Commission continue its work with industry "to develop specific and measurable objectives" for the Commission's Framework, including such outputs to measure the extent of the Framework's use.[2] In a December 1, 2017 response to a draft of the Wireless Resiliency Report, the Chief of the Commission's Public Safety and Homeland Security Bureau (Bureau) noted that the voluntary Framework is based on cooperation with wireless telecommunications providers, and agreed with GAO's recommendation.[3] Commission staff is undertaking to work with the Framework's signatories, as well as other industry stakeholders, to evaluate whether there are measureable objectives that accurately reflect the extent of the Framework's use. I anticipate this outreach will result in the development of measurable outputs that will provide the Commission with practical information on the usefulness of the Framework.

The Wireless Resiliency Report also recommends that the Commission "develop a plan to monitor the outputs and outcomes of the Wireless Network Resiliency Cooperative Framework and document the results of its monitoring to evaluate its effectiveness and identify whether changes are needed."[4] I will ensure that FCC staff has developed a structured plan to monitor and evaluate the Framework's impact on wireless network resiliency. We will then work with industry and other affected stakeholders to identify areas for improvement and determine how the Framework may be adjusted to better improve wireless network resiliency.

---

[1] GAO, FCC Should Improve Monitoring of Industry Efforts to Strengthen Wireless Network Resiliency, GAO 18-198, available at https://www.gao.gov/products/GAO-18-198.
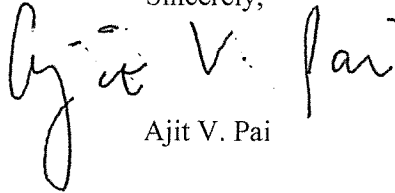
[2] *Id.* at 36.

[3] *Id.* at 53.

[4] *Id.*

I also agree with the Wireless Resiliency Report's recommendation that the Commission "should promote awareness about the elements of and any outcomes from the Wireless Network Resiliency Cooperative Framework among state and local public safety officials and other industry stakeholders, such as through existing outreach mechanisms and government-industry forums."[5] As the Bureau Chief noted in her response to GAO, we will leverage our existing methods of regularly sharing information with relevant state, local public safety and other industry stakeholders to promote greater awareness of the Framework's elements and outcomes.[6] We will also rely on our existing participation in the Federal Emergency Management Agency's ten Regional Emergency Communications Coordination Working Groups, which include emergency response organizations from federal, state, tribal, and local governments, nongovernmental organizations, and private sector entities, to further this awareness.[7]

I appreciate GAO's thorough analysis and recommendations. Thank you for the opportunity to respond to the Wireless Resiliency Report, and I look forward to discussing this issue with you further if you have any questions.

Sincerely,

Ajit V. Pai

---

[5] *Id.* at 36.

[6] *Id.* at 53.

[7] *Id.*

February 22, 2018

The Honorable Bill Nelson
Ranking Member
Committee on Commerce, Science, and Transportation
United States Senate
425 Hart Senate Office Building
Washington, D.C. 20510

Dear Senator Nelson:

On January 9, 2018, the Government Accountability Office (GAO) publicly released a report entitled *FCC Should Improve Monitoring of Industry Efforts to Strengthen Wireless Network Resiliency*, GAO 18-198 (Wireless Resiliency Report).[1] GAO was asked to examine federal efforts to ensure the resiliency of wireless networks following natural disasters and other physical incidents. The Wireless Resiliency Report examines: (1) trends in mobile wireless outages reported to the FCC since 2009 and (2) actions federal agencies and industry have taken since 2013 (after Hurricane Sandy) to improve wireless network resiliency, among other objectives. GAO also assessed the FCC's efforts to monitor an industry initiative, the Wireless Resiliency Cooperative Framework (Framework), to improve wireless network resiliency against federal internal control standards.

The Wireless Resiliency Report recommends that the Commission continue its work with industry "to develop specific and measurable objectives" for the Commission's Framework, including such outputs to measure the extent of the Framework's use.[2] In a December 1, 2017 response to a draft of the Wireless Resiliency Report, the Chief of the Commission's Public Safety and Homeland Security Bureau (Bureau) noted that the voluntary Framework is based on cooperation with wireless telecommunications providers, and agreed with GAO's recommendation.[3] Commission staff is undertaking to work with the Framework's signatories, as well as other industry stakeholders, to evaluate whether there are measureable objectives that accurately reflect the extent of the Framework's use. I anticipate this outreach will result in the development of measurable outputs that will provide the Commission with practical information on the usefulness of the Framework.

The Wireless Resiliency Report also recommends that the Commission "develop a plan to monitor the outputs and outcomes of the Wireless Network Resiliency Cooperative Framework and document the results of its monitoring to evaluate its effectiveness and identify whether changes are needed."[4] I will ensure that FCC staff has developed a structured plan to monitor and evaluate the Framework's impact on wireless network resiliency. We will then work with industry and other affected stakeholders to identify areas for improvement and determine how the Framework may be adjusted to better improve wireless network resiliency.

---

[1] GAO, FCC Should Improve Monitoring of Industry Efforts to Strengthen Wireless Network Resiliency, GAO 18-198, available at https://www.gao.gov/products/GAO-18-198.
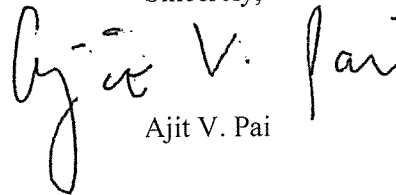
[2] *Id.* at 36.

[3] *Id.* at 53.

[4] *Id.*

I also agree with the Wireless Resiliency Report's recommendation that the Commission "should promote awareness about the elements of and any outcomes from the Wireless Network Resiliency Cooperative Framework among state and local public safety officials and other industry stakeholders, such as through existing outreach mechanisms and government-industry forums."[5] As the Bureau Chief noted in her response to GAO, we will leverage our existing methods of regularly sharing information with relevant state, local public safety and other industry stakeholders to promote greater awareness of the Framework's elements and outcomes.[6] We will also rely on our existing participation in the Federal Emergency Management Agency's ten Regional Emergency Communications Coordination Working Groups, which include emergency response organizations from federal, state, tribal, and local governments, nongovernmental organizations, and private sector entities, to further this awareness.[7]

I appreciate GAO's thorough analysis and recommendations. Thank you for the opportunity to respond to the Wireless Resiliency Report, and I look forward to discussing this issue with you further if you have any questions.

Sincerely,

Ajit V. Pai

---

[5] *Id.* at 36.

[6] *Id.* at 53.

[7] *Id.*

February 22, 2018

The Honorable John Thune
Chairman
Committee on Commerce, Science, and Transportation
United States Senate
512 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Chairman Thune:

On January 9, 2018, the Government Accountability Office (GAO) publicly released a report entitled *FCC Should Improve Monitoring of Industry Efforts to Strengthen Wireless Network Resiliency*, GAO 18-198 (Wireless Resiliency Report).[1] GAO was asked to examine federal efforts to ensure the resiliency of wireless networks following natural disasters and other physical incidents. The Wireless Resiliency Report examines: (1) trends in mobile wireless outages reported to the FCC since 2009 and (2) actions federal agencies and industry have taken since 2013 (after Hurricane Sandy) to improve wireless network resiliency, among other objectives. GAO also assessed the FCC's efforts to monitor an industry initiative, the Wireless Resiliency Cooperative Framework (Framework), to improve wireless network resiliency against federal internal control standards.

The Wireless Resiliency Report recommends that the Commission continue its work with industry "to develop specific and measurable objectives" for the Commission's Framework, including such outputs to measure the extent of the Framework's use.[2] In a December 1, 2017 response to a draft of the Wireless Resiliency Report, the Chief of the Commission's Public Safety and Homeland Security Bureau (Bureau) noted that the voluntary Framework is based on cooperation with wireless telecommunications providers, and agreed with GAO's recommendation.[3] Commission staff is undertaking to work with the Framework's signatories, as well as other industry stakeholders, to evaluate whether there are measureable objectives that accurately reflect the extent of the Framework's use. I anticipate this outreach will result in the development of measurable outputs that will provide the Commission with practical information on the usefulness of the Framework.

The Wireless Resiliency Report also recommends that the Commission "develop a plan to monitor the outputs and outcomes of the Wireless Network Resiliency Cooperative Framework and document the results of its monitoring to evaluate its effectiveness and identify whether changes are needed."[4] I will ensure that FCC staff has developed a structured plan to monitor and evaluate the Framework's impact on wireless network resiliency. We will then work with industry and other affected stakeholders to identify areas for improvement and determine how the Framework may be adjusted to better improve wireless network resiliency.

---

[1] GAO, FCC Should Improve Monitoring of Industry Efforts to Strengthen Wireless Network Resiliency, GAO 18-198, available at https://www.gao.gov/products/GAO-18-198.
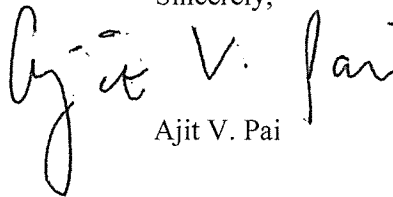
[2] *Id.* at 36.

[3] *Id.* at 53.

[4] *Id.*

I also agree with the Wireless Resiliency Report's recommendation that the Commission "should promote awareness about the elements of and any outcomes from the Wireless Network Resiliency Cooperative Framework among state and local public safety officials and other industry stakeholders, such as through existing outreach mechanisms and government-industry forums."[5] As the Bureau Chief noted in her response to GAO, we will leverage our existing methods of regularly sharing information with relevant state, local public safety and other industry stakeholders to promote greater awareness of the Framework's elements and outcomes.[6] We will also rely on our existing participation in the Federal Emergency Management Agency's ten Regional Emergency Communications Coordination Working Groups, which include emergency response organizations from federal, state, tribal, and local governments, nongovernmental organizations, and private sector entities, to further this awareness.[7]

I appreciate GAO's thorough analysis and recommendations. Thank you for the opportunity to respond to the Wireless Resiliency Report, and I look forward to discussing this issue with you further if you have any questions.

Sincerely,

Ajit V. Pai

---

[5] *Id.* at 36.

[6] *Id.* at 53.

[7] *Id.*

February 22, 2018

The Honorable Chris Coons
Ranking Member
Subcommittee on Financial Services and General Government
Committee on Appropriations
United States Senate
128 Capital Building
Washington, D.C. 20510

Dear Senator Coons:

On January 9, 2018, the Government Accountability Office (GAO) publicly released a report entitled *FCC Should Improve Monitoring of Industry Efforts to Strengthen Wireless Network Resiliency*, GAO 18-198 (Wireless Resiliency Report).[1] GAO was asked to examine federal efforts to ensure the resiliency of wireless networks following natural disasters and other physical incidents. The Wireless Resiliency Report examines: (1) trends in mobile wireless outages reported to the FCC since 2009 and (2) actions federal agencies and industry have taken since 2013 (after Hurricane Sandy) to improve wireless network resiliency, among other objectives. GAO also assessed the FCC's efforts to monitor an industry initiative, the Wireless Resiliency Cooperative Framework (Framework), to improve wireless network resiliency against federal internal control standards.

The Wireless Resiliency Report recommends that the Commission continue its work with industry "to develop specific and measurable objectives" for the Commission's Framework, including such outputs to measure the extent of the Framework's use.[2] In a December 1, 2017 response to a draft of the Wireless Resiliency Report, the Chief of the Commission's Public Safety and Homeland Security Bureau (Bureau) noted that the voluntary Framework is based on cooperation with wireless telecommunications providers, and agreed with GAO's recommendation.[3] Commission staff is undertaking to work with the Framework's signatories, as well as other industry stakeholders, to evaluate whether there are measureable objectives that accurately reflect the extent of the Framework's use. I anticipate this outreach will result in the development of measurable outputs that will provide the Commission with practical information on the usefulness of the Framework.

The Wireless Resiliency Report also recommends that the Commission "develop a plan to monitor the outputs and outcomes of the Wireless Network Resiliency Cooperative Framework and document the results of its monitoring to evaluate its effectiveness and identify whether changes are needed."[4] I will ensure that FCC staff has developed a structured plan to monitor and evaluate the Framework's impact on wireless network resiliency. We will then work with industry and other affected stakeholders to identify areas for improvement and determine how the Framework may be adjusted to better improve wireless network resiliency.

---

[1] GAO, FCC Should Improve Monitoring of Industry Efforts to Strengthen Wireless Network Resiliency, GAO 18-198, available at https://www.gao.gov/products/GAO-18-198.
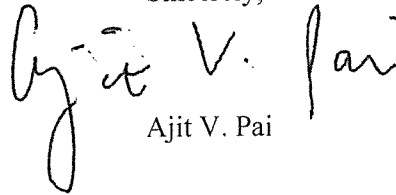
[2] *Id.* at 36.

[3] *Id.* at 53.

[4] *Id.*

I also agree with the Wireless Resiliency Report's recommendation that the Commission "should promote awareness about the elements of and any outcomes from the Wireless Network Resiliency Cooperative Framework among state and local public safety officials and other industry stakeholders, such as through existing outreach mechanisms and government-industry forums."[5] As the Bureau Chief noted in her response to GAO, we will leverage our existing methods of regularly sharing information with relevant state, local public safety and other industry stakeholders to promote greater awareness of the Framework's elements and outcomes.[6] We will also rely on our existing participation in the Federal Emergency Management Agency's ten Regional Emergency Communications Coordination Working Groups, which include emergency response organizations from federal, state, tribal, and local governments, nongovernmental organizations, and private sector entities, to further this awareness.[7]

I appreciate GAO's thorough analysis and recommendations. Thank you for the opportunity to respond to the Wireless Resiliency Report, and I look forward to discussing this issue with you further if you have any questions.

Sincerely,

Ajit V. Pai

---

[5] *Id.* at 36.

[6] *Id.* at 53.

[7] *Id.*

February 22, 2018

The Honorable Shelley Moore Capito
Chairwoman
Subcommittee on Financial Services and General Government
Committee on Appropriations
United States Senate
128 Capital Building
Washington, D.C. 20510

Dear Chairwoman Capito:

On January 9, 2018, the Government Accountability Office (GAO) publicly released a report entitled *FCC Should Improve Monitoring of Industry Efforts to Strengthen Wireless Network Resiliency*, GAO 18-198 (Wireless Resiliency Report).[1] GAO was asked to examine federal efforts to ensure the resiliency of wireless networks following natural disasters and other physical incidents. The Wireless Resiliency Report examines: (1) trends in mobile wireless outages reported to the FCC since 2009 and (2) actions federal agencies and industry have taken since 2013 (after Hurricane Sandy) to improve wireless network resiliency, among other objectives. GAO also assessed the FCC's efforts to monitor an industry initiative, the Wireless Resiliency Cooperative Framework (Framework), to improve wireless network resiliency against federal internal control standards.

The Wireless Resiliency Report recommends that the Commission continue its work with industry "to develop specific and measurable objectives" for the Commission's Framework, including such outputs to measure the extent of the Framework's use.[2] In a December 1, 2017 response to a draft of the Wireless Resiliency Report, the Chief of the Commission's Public Safety and Homeland Security Bureau (Bureau) noted that the voluntary Framework is based on cooperation with wireless telecommunications providers, and agreed with GAO's recommendation.[3] Commission staff is undertaking to work with the Framework's signatories, as well as other industry stakeholders, to evaluate whether there are measureable objectives that accurately reflect the extent of the Framework's use. I anticipate this outreach will result in the development of measurable outputs that will provide the Commission with practical information on the usefulness of the Framework.

The Wireless Resiliency Report also recommends that the Commission "develop a plan to monitor the outputs and outcomes of the Wireless Network Resiliency Cooperative Framework and document the results of its monitoring to evaluate its effectiveness and identify whether changes are needed."[4] I will ensure that FCC staff has developed a structured plan to monitor and evaluate the Framework's impact on wireless network resiliency. We will then work with industry and other affected stakeholders to identify areas for improvement and determine how the Framework may be adjusted to better improve wireless network resiliency.

---

[1] GAO, FCC Should Improve Monitoring of Industry Efforts to Strengthen Wireless Network Resiliency, GAO 18-198, available at https://www.gao.gov/products/GAO-18-198.
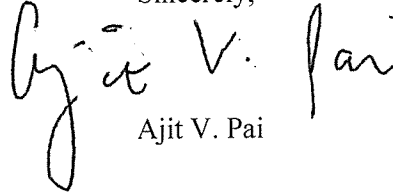
[2] *Id.* at 36.

[3] *Id.* at 53.

[4] *Id.*

I also agree with the Wireless Resiliency Report's recommendation that the Commission "should promote awareness about the elements of and any outcomes from the Wireless Network Resiliency Cooperative Framework among state and local public safety officials and other industry stakeholders, such as through existing outreach mechanisms and government-industry forums."[5] As the Bureau Chief noted in her response to GAO, we will leverage our existing methods of regularly sharing information with relevant state, local public safety and other industry stakeholders to promote greater awareness of the Framework's elements and outcomes.[6] We will also rely on our existing participation in the Federal Emergency Management Agency's ten Regional Emergency Communications Coordination Working Groups, which include emergency response organizations from federal, state, tribal, and local governments, nongovernmental organizations, and private sector entities, to further this awareness.[7]

I appreciate GAO's thorough analysis and recommendations. Thank you for the opportunity to respond to the Wireless Resiliency Report, and I look forward to discussing this issue with you further if you have any questions.

Sincerely,

Ajit V. Pai

---

[5] *Id.* at 36.

[6] *Id.* at 53.

[7] *Id.*

The Honorable Mike Quigley
Ranking Member
Subcommittee on Financial Services and General Government
Committee on Appropriations
U.S. House of Representatives
2000 Rayburn House Office Building (G Floor)
Washington, D.C. 20515

Dear Congressman Quigley:

On January 9, 2018, the Government Accountability Office (GAO) publicly released a report entitled *FCC Should Improve Monitoring of Industry Efforts to Strengthen Wireless Network Resiliency*, GAO 18-198 (Wireless Resiliency Report).[1] GAO was asked to examine federal efforts to ensure the resiliency of wireless networks following natural disasters and other physical incidents. The Wireless Resiliency Report examines: (1) trends in mobile wireless outages reported to the FCC since 2009 and (2) actions federal agencies and industry have taken since 2013 (after Hurricane Sandy) to improve wireless network resiliency, among other objectives. GAO also assessed the FCC's efforts to monitor an industry initiative, the Wireless Resiliency Cooperative Framework (Framework), to improve wireless network resiliency against federal internal control standards.

The Wireless Resiliency Report recommends that the Commission continue its work with industry "to develop specific and measurable objectives" for the Commission's Framework, including such outputs to measure the extent of the Framework's use.[2] In a December 1, 2017 response to a draft of the Wireless Resiliency Report, the Chief of the Commission's Public Safety and Homeland Security Bureau (Bureau) noted that the voluntary Framework is based on cooperation with wireless telecommunications providers, and agreed with GAO's recommendation.[3] Commission staff is undertaking to work with the Framework's signatories, as well as other industry stakeholders, to evaluate whether there are measureable objectives that accurately reflect the extent of the Framework's use. I anticipate this outreach will result in the development of measurable outputs that will provide the Commission with practical information on the usefulness of the Framework.

The Wireless Resiliency Report also recommends that the Commission "develop a plan to monitor the outputs and outcomes of the Wireless Network Resiliency Cooperative Framework and document the results of its monitoring to evaluate its effectiveness and identify whether changes are needed."[4] I will ensure that FCC staff has developed a structured plan to monitor and evaluate the Framework's impact on wireless network resiliency. We will then work with industry and other affected stakeholders to identify areas for improvement and determine how the Framework may be adjusted to better improve wireless network resiliency.

---

[1] GAO, FCC Should Improve Monitoring of Industry Efforts to Strengthen Wireless Network Resiliency, GAO 18-198, available at https://www.gao.gov/products/GAO-18-198.
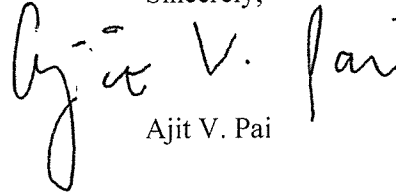
[2] *Id.* at 36.

[3] *Id.* at 53.

[4] *Id.*

I also agree with the Wireless Resiliency Report's recommendation that the Commission "should promote awareness about the elements of and any outcomes from the Wireless Network Resiliency Cooperative Framework among state and local public safety officials and other industry stakeholders, such as through existing outreach mechanisms and government-industry forums."[5] As the Bureau Chief noted in her response to GAO, we will leverage our existing methods of regularly sharing information with relevant state, local public safety and other industry stakeholders to promote greater awareness of the Framework's elements and outcomes.[6] We will also rely on our existing participation in the Federal Emergency Management Agency's ten Regional Emergency Communications Coordination Working Groups, which include emergency response organizations from federal, state, tribal, and local governments, nongovernmental organizations, and private sector entities, to further this awareness.[7]

I appreciate GAO's thorough analysis and recommendations. Thank you for the opportunity to respond to the Wireless Resiliency Report, and I look forward to discussing this issue with you further if you have any questions.

Sincerely,

Ajit V. Pai

---

[5] *Id.* at 36.

[6] *Id.* at 53.

[7] *Id.*

OFFICE OF
THE CHAIRMAN

February 22, 2018

The Honorable Tom Graves
Chairman
Subcommittee on Financial Services and General Government
Committee on Appropriations
U.S. House of Representatives
2000 Rayburn House Office Building (G Floor)
Washington, D.C. 20515

Dear Chairman Graves:

On January 9, 2018, the Government Accountability Office (GAO) publicly released a report entitled *FCC Should Improve Monitoring of Industry Efforts to Strengthen Wireless Network Resiliency*, GAO 18-198 (Wireless Resiliency Report).[1] GAO was asked to examine federal efforts to ensure the resiliency of wireless networks following natural disasters and other physical incidents. The Wireless Resiliency Report examines: (1) trends in mobile wireless outages reported to the FCC since 2009 and (2) actions federal agencies and industry have taken since 2013 (after Hurricane Sandy) to improve wireless network resiliency, among other objectives. GAO also assessed the FCC's efforts to monitor an industry initiative, the Wireless Resiliency Cooperative Framework (Framework), to improve wireless network resiliency against federal internal control standards.

The Wireless Resiliency Report recommends that the Commission continue its work with industry "to develop specific and measurable objectives" for the Commission's Framework, including such outputs to measure the extent of the Framework's use.[2] In a December 1, 2017 response to a draft of the Wireless Resiliency Report, the Chief of the Commission's Public Safety and Homeland Security Bureau (Bureau) noted that the voluntary Framework is based on cooperation with wireless telecommunications providers, and agreed with GAO's recommendation.[3] Commission staff is undertaking to work with the Framework's signatories, as well as other industry stakeholders, to evaluate whether there are measureable objectives that accurately reflect the extent of the Framework's use. I anticipate this outreach will result in the development of measurable outputs that will provide the Commission with practical information on the usefulness of the Framework.

The Wireless Resiliency Report also recommends that the Commission "develop a plan to monitor the outputs and outcomes of the Wireless Network Resiliency Cooperative Framework and document the results of its monitoring to evaluate its effectiveness and identify whether changes are needed."[4] I will ensure that FCC staff has developed a structured plan to monitor and evaluate the Framework's impact on wireless network resiliency. We will then work with industry and other affected

---

[1] GAO, FCC Should Improve Monitoring of Industry Efforts to Strengthen Wireless Network Resiliency, GAO 18-198, available at https://www.gao.gov/products/GAO-18-198.
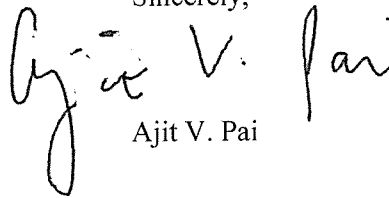
[2] *Id.* at 36.

[3] *Id.* at 53.

[4] *Id.*

stakeholders to identify areas for improvement and determine how the Framework may be adjusted to better improve wireless network resiliency.

I also agree with the Wireless Resiliency Report's recommendation that the Commission "should promote awareness about the elements of and any outcomes from the Wireless Network Resiliency Cooperative Framework among state and local public safety officials and other industry stakeholders, such as through existing outreach mechanisms and government-industry forums."[5] As the Bureau Chief noted in her response to GAO, we will leverage our existing methods of regularly sharing information with relevant state, local public safety and other industry stakeholders to promote greater awareness of the Framework's elements and outcomes.[6] We will also rely on our existing participation in the Federal Emergency Management Agency's ten Regional Emergency Communications Coordination Working Groups, which include emergency response organizations from federal, state, tribal, and local governments, nongovernmental organizations, and private sector entities, to further this awareness.[7]

I appreciate GAO's thorough analysis and recommendations. Thank you for the opportunity to respond to the Wireless Resiliency Report, and I look forward to discussing this issue with you further if you have any questions.

Sincerely,

Ajit V. Pai

---

[5] *Id.* at 36.

[6] *Id.* at 53.

[7] *Id.*

February 22, 2018

The Honorable Ron Johnson
Chairman
Committee on Homeland Security and Governmental Affairs
United States Senate
340 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Chairman Johnson:

On January 9, 2018, the Government Accountability Office (GAO) publicly released a report entitled *FCC Should Improve Monitoring of Industry Efforts to Strengthen Wireless Network Resiliency*, GAO 18-198 (Wireless Resiliency Report).[1] GAO was asked to examine federal efforts to ensure the resiliency of wireless networks following natural disasters and other physical incidents. The Wireless Resiliency Report examines: (1) trends in mobile wireless outages reported to the FCC since 2009 and (2) actions federal agencies and industry have taken since 2013 (after Hurricane Sandy) to improve wireless network resiliency, among other objectives. GAO also assessed the FCC's efforts to monitor an industry initiative, the Wireless Resiliency Cooperative Framework (Framework), to improve wireless network resiliency against federal internal control standards.

The Wireless Resiliency Report recommends that the Commission continue its work with industry "to develop specific and measurable objectives" for the Commission's Framework, including such outputs to measure the extent of the Framework's use.[2] In a December 1, 2017 response to a draft of the Wireless Resiliency Report, the Chief of the Commission's Public Safety and Homeland Security Bureau (Bureau) noted that the voluntary Framework is based on cooperation with wireless telecommunications providers, and agreed with GAO's recommendation.[3] Commission staff is undertaking to work with the Framework's signatories, as well as other industry stakeholders, to evaluate whether there are measureable objectives that accurately reflect the extent of the Framework's use. I anticipate this outreach will result in the development of measurable outputs that will provide the Commission with practical information on the usefulness of the Framework.

The Wireless Resiliency Report also recommends that the Commission "develop a plan to monitor the outputs and outcomes of the Wireless Network Resiliency Cooperative Framework and document the results of its monitoring to evaluate its effectiveness and identify whether changes are needed."[4] I will ensure that FCC staff has developed a structured plan to monitor and evaluate the Framework's impact on wireless network resiliency. We will then work with industry and other affected stakeholders to identify areas for improvement and determine how the Framework may be adjusted to better improve wireless network resiliency.

---

[1] GAO, FCC Should Improve Monitoring of Industry Efforts to Strengthen Wireless Network Resiliency, GAO 18-198, available at https://www.gao.gov/products/GAO-18-198.
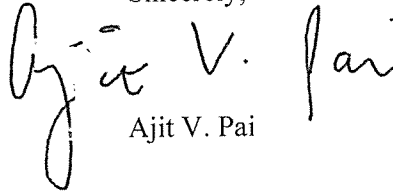
[2] *Id.* at 36.

[3] *Id.* at 53.

[4] *Id.*

I also agree with the Wireless Resiliency Report's recommendation that the Commission "should promote awareness about the elements of and any outcomes from the Wireless Network Resiliency Cooperative Framework among state and local public safety officials and other industry stakeholders, such as through existing outreach mechanisms and government-industry forums."[5] As the Bureau Chief noted in her response to GAO, we will leverage our existing methods of regularly sharing information with relevant state, local public safety and other industry stakeholders to promote greater awareness of the Framework's elements and outcomes.[6] We will also rely on our existing participation in the Federal Emergency Management Agency's ten Regional Emergency Communications Coordination Working Groups, which include emergency response organizations from federal, state, tribal, and local governments, nongovernmental organizations, and private sector entities, to further this awareness.[7]

I appreciate GAO's thorough analysis and recommendations. Thank you for the opportunity to respond to the Wireless Resiliency Report, and I look forward to discussing this issue with you further if you have any questions.

Sincerely,

Ajit V. Pai

---

[5] *Id.* at 36.

[6] *Id.* at 53.

[7] *Id.*