REDACTED – FOR PUBLIC INSPECTION

Auction 901
FCC Form 690

FCC FORM 690 LINE 211: PROJECT STATUS DESCRIPTION

Project Description and Statement of Technical Feasibility

Winning Bid Census Tract No. T53015001700 (Cowlitz, WA)

SAC 528004

Total Bid Amount: $1,590,142.50

I. Project Summary

United States Cellular Corporation ("Applicant") currently provides wireless services in Washington. Applicant operates a 3G/4G wireless voice and data network incorporating state-of the-art technologies including CDMA [redacted] and 4G LTE (Long Term Evolution). For this particular winning bid census tract, Applicant plans to construct [redacted] new LTE cell sites in order to provide coverage to the unserved qualifying roads in the eligible census blocks within the winning bid census tract.

Applicant plans to use [redacted] 4G LTE technology to provide the required service. LTE incorporates Multiple In Multiple Out (MIMO) technology, the Orthogonal Frequency Division Multiple Access (OFDMA) air interface in the downlink and Single Carrier FDMA in the uplink. This combination provides high levels of spectral efficiency and network performance, coupled with high network capacity and low latency [redacted] 4G LTE.

Installation of new cell sites will enable Applicant to meet its public interest obligations to provide rural citizens with access to advanced telecommunications and information technologies that are reasonably comparable to those available in urban areas. Applicant has

identified areas that lack high-quality coverage, that is, dead zones where citizens have inconsistent access to wireless network signals or where coverage is insufficient to allow mobile usage without dropped calls.

Use of support from Auction 901 will permit Applicant improve and expand coverage, and to cover operating and maintenance expenses expected in remote areas that are not expected to be cash flow positive for many years, if ever. In many areas where Applicant currently serves, consumers have access to data speeds that are insufficient to stream high quality video and transmit large files without significant delay. Installation of 4G service will significantly increase data speeds, well in excess of the 4/1 throughput requirement.

This will serve the public interest by allowing consumers to make more efficient use of high speed products and services, including smart phone devices, providing access to a wide variety of software applications. In every area where coverage is improved, rural citizens will see significant public safety benefits, as access to 911, E-911 and other important communications are all facilitated by improved connectivity in a mobile environment.

II. Project Timeline

MILESTONES	START	END
1. Network Design	[redacted]	[redacted]
2. Drafting, Posting of RFPs if applicable	[redacted]	[redacted]
3. Vendor Selection	[redacted]	[redacted]
4. Contract Negotiation if applicable	[redacted]	[redacted]
5. Construction	[redacted]	[redacted]
6. Meeting requirements for $$ Installments		
a.1st disbursement - upon award, no other requirements		6/15/2013
b. 2nd disbursement -		
i. report demonstrating 50% road miles covered		when 50% coverage attained
ii. 2nd LOC or increase to initial LOC to cover disbursement amount		when 50% coverage attained

c. 3rd/final disbursement -		
i. report demonstrating 75% road miles covered (3yrs for 4G)		[redacted]

Applicant has completed a preliminary network design, which has informed its bidding strategy. Upon grant of its application, Applicant will finalize its network design and budget, based on the then-current status of its network and then-current costs associated with purchasing the necessary equipment. Applicant employs radio-frequency engineers, as well as consulting engineers, to develop a final network design plan. Applicant expects that this process will take approximately four to six weeks.

Applicant is in the midst of its construction project, ordering equipment, and managing installations in a rapid but orderly fashion. Likewise, it is installing equipment needed to upgrade its backhaul and network core facilities, so that all new network equipment that is installed is capable of providing service immediately. Applicant selected its vendors and all contracting that was required has been completed.

Construction, installation and testing are expected to be complete by [redacted]. The actual date of network deployment will vary depending upon a number of factors, including for example, equipment availability, cell site preparation, zoning and permitting approvals, weather and other factors discussed above. Nonetheless, Applicant expects it will achieve 75% or greater coverage and that it will complete its network construction on or about [redacted]

III. Statement of Technical Feasibility

These network deployments and improvements are all technically feasible because they represent an extension of Applicant's existing network, which has been providing service for a number of years. The projected cost of Applicant's project plan and necessary operating and maintenance expenses exceed the amount of Auction 901 support that it will receive, and the company is prepared to invest the additional capital needed to complete the project. It has undertaken a financial analysis of the technical feasibility of meeting the FCC's coverage requirements and based on that analysis, it has determined that the combination of support and internally generated capital will be sufficient.

Applicant understands that the FCC's Auction 901 funding commitment is limited to the winning bid amount, and that Applicant will be responsible for providing additional internally generated capital, if needed, to meet the Commission's coverage and service requirements.

Applicant has already successfully rolled out 4G LTE service in much of its existing network. Applicant has familiarity with the challenges of deploying 4G technology as well as established relationships with equipment and handset vendors. Applicant understands the challenges of deploying a high-speed data network in a rural area and is fully confident that the technology it has chosen is technically feasible and that it has the necessary expertise to deploy a technically capable network solution that meets the FCC's coverage and throughput requirements.

Applicant will purchase peripheral technologies such as battery back-ups and diesel generators to ensure that its new network equipment is sufficiently hardened to withstand natural and man-made disasters.

IV. Budget Breakdown

Census Tract	County/State	Bid	Project Budget Total
T53015001700	Cowlitz, WA	$1,590,142.50	[redacted]

The following list compares the budget to actual costs incurred as of December 31, 2013 for the activities in the project plan.

USAC Category	Project Budget Detail	Budget - Cost to Complete	Costs Incurred as of 12/31/2014
Network Design	Network Design	In House	In House
Construction	[redacted]	[redacted]	[redacted]
Deployment	[redacted]	[redacted]	[redacted]
Maintenance	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]

The projected build plan set forth above, including costs and timeframes, are good-faith estimates based on current information and subject to change, depending on a variety of factors such as but not limited to terrain, zoning or other restriction on land usage, weather, and equipment availability from the selected vendors.

Auction 901
FCC Form 690

FCC FORM 690 LINE 211: PROJECT STATUS DESCRIPTION

Project Description and Statement of Technical Feasibility

Winning Bid Census Tract No. T53041970100 (Lewis, WA)

SAC 528005

Total Bid Amount: $1,135,416.50

I. Project Summary

United States Cellular Corporation ("Applicant") currently provides wireless services in Washington. Applicant operates a 3G/4G wireless voice and data network incorporating state-of the-art technologies including CDMA [redacted] and 4G LTE (Long Term Evolution). For this particular winning bid census tract, Applicant plans to construct [redacted] new LTE cell sites in order to provide coverage to the unserved qualifying roads in the eligible census blocks within the winning bid census tract.

Applicant plans to use [redacted] 4G LTE technology to provide the required service. LTE incorporates Multiple In Multiple Out (MIMO) technology, the Orthogonal Frequency Division Multiple Access (OFDMA) air interface in the downlink and Single Carrier FDMA in the uplink. This combination provides high levels of spectral efficiency and network performance, coupled with high network capacity and low latency [redacted] 4G LTE.

Installation of new cell sites will enable Applicant to meet its public interest obligations to provide rural citizens with access to advanced telecommunications and information technologies that are reasonably comparable to those available in urban areas. Applicant has

identified areas that lack high-quality coverage, that is, dead zones where citizens have inconsistent access to wireless network signals or where coverage is insufficient to allow mobile usage without dropped calls.

Use of support from Auction 901 will permit Applicant improve and expand coverage, and to cover operating and maintenance expenses expected in remote areas that are not expected to be cash flow positive for many years, if ever. In many areas where Applicant currently serves, consumers have access to data speeds that are insufficient to stream high quality video and transmit large files without significant delay. Installation of 4G service will significantly increase data speeds, well in excess of the 4/1 throughput requirement.

This will serve the public interest by allowing consumers to make more efficient use of high speed products and services, including smart phone devices, providing access to a wide variety of software applications. In every area where coverage is improved, rural citizens will see significant public safety benefits, as access to 911, E-911 and other important communications are all facilitated by improved connectivity in a mobile environment.

II. Project Timeline

MILESTONES	START	END
1. Network Design	[redacted]	[redacted]
2. Drafting, Posting of RFPs if applicable	[redacted]	[redacted]
3. Vendor Selection	[redacted]	[redacted]
4. Contract Negotiation if applicable	[redacted]	[redacted]
5. Construction	[redacted]	[redacted]
6. Meeting requirements for $$ Installments		
a.1st disbursement - upon award, no other requirements		6/15/2013
b. 2nd disbursement -		
i. report demonstrating 50% road miles covered		when 50% coverage attained
ii. 2nd LOC or increase to initial LOC to cover disbursement amount		when 50% coverage attained

c. 3rd/final disbursement -		
i. report demonstrating 75% road miles covered (3yrs for 4G)		[redacted]

Applicant has completed a preliminary network design, which has informed its bidding strategy. Upon grant of its application, Applicant will finalize its network design and budget, based on the then-current status of its network and then-current costs associated with purchasing the necessary equipment. Applicant employs radio-frequency engineers, as well as consulting engineers, to develop a final network design plan. Applicant expects that this process will take approximately four to six weeks.

Applicant is in the midst of its construction project, ordering equipment, and managing installations in a rapid but orderly fashion. Likewise, it is installing equipment needed to upgrade its backhaul and network core facilities, so that all new network equipment that is installed is capable of providing service immediately. Applicant selected its vendors and all contracting that was required has been completed.

Construction, installation and testing are expected to be complete by [redacted]. The actual date of network deployment will vary depending upon a number of factors, including for example, equipment availability, cell site preparation, zoning and permitting approvals, weather and other factors discussed above. Nonetheless, Applicant expects it will achieve 75% or greater coverage and that it will complete its network construction on or about [redacted].

III. Statement of Technical Feasibility

These network deployments and improvements are all technically feasible because they represent an extension of Applicant's existing network, which has been providing service for a number of years. The projected cost of Applicant's project plan and necessary operating and maintenance expenses exceed the amount of Auction 901 support that it will receive, and the company is prepared to invest the additional capital needed to complete the project. It has undertaken a financial analysis of the technical feasibility of meeting the FCC's coverage requirements and based on that analysis, it has determined that the combination of support and internally generated capital will be sufficient.

Applicant understands that the FCC's Auction 901 funding commitment is limited to the winning bid amount, and that Applicant will be responsible for providing additional internally generated capital, if needed, to meet the Commission's coverage and service requirements.

Applicant has already successfully rolled out 4G LTE service in much of its existing network. Applicant has familiarity with the challenges of deploying 4G technology as well as established relationships with equipment and handset vendors. Applicant understands the challenges of deploying a high-speed data network in a rural area and is fully confident that the technology it has chosen is technically feasible and that it has the necessary expertise to deploy a technically capable network solution that meets the FCC's coverage and throughput requirements.

Applicant will purchase peripheral technologies such as battery back-ups and diesel generators to ensure that its new network equipment is sufficiently hardened to withstand natural and man-made disasters.

IV. Budget and Actual Spending Breakdown

Census Tract	County/State	Bid	Project Budget Total
T53041970100	Lewis, WA	$1,135,416.50	[redacted]

The following list compares the budget to actual costs incurred as of December 31, 2013 for the activities in the project plan.

USAC Category	Project Budget Detail	Budget - Cost to Complete	Costs Incurred as of 12/31/2014
Network Design	Network Design	In House	In House
Construction	[redacted]	[redacted]	[redacted]
Deployment	[redacted]	[redacted]	[redacted]
Maintenance	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]

The projected build plan set forth above, including costs and timeframes, are good-faith estimates based on current information and subject to change, depending on a variety of factors such as but not limited to terrain, zoning or other restriction on land usage, weather, and equipment availability from the selected vendors.

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Auction 901
FCC Form 690

FCC FORM 690 LINE 211: PROJECT STATUS DESCRIPTION

Project Description and Statement of Technical Feasibility

Winning Bid Census Tract No. T53059950200 (Skamania, WA)

SAC 528006

Total Bid Amount: $1,885,786.56

I. Project Summary

United States Cellular Corporation ("Applicant") currently provides wireless services in Washington. Applicant operates a 3G/4G wireless voice and data network incorporating state-of the-art technologies including CDMA [redacted] and 4G LTE (Long Term Evolution). For this particular winning bid census tract, Applicant plans to construct [redacted] new LTE cell site in order to provide coverage to the unserved qualifying roads in the eligible census blocks within the winning bid census tract.

Applicant plans to use [redacted] 4G LTE technology to provide the required service. LTE incorporates Multiple In Multiple Out (MIMO) technology, the Orthogonal Frequency Division Multiple Access (OFDMA) air interface in the downlink and Single Carrier FDMA in the uplink. This combination provides high levels of spectral efficiency and network performance, coupled with high network capacity and low latency [redacted] 4G LTE.

Installation of a new cell site will enable Applicant to meet its public interest obligations to provide rural citizens with access to advanced telecommunications and information technologies that are reasonably comparable to those available in urban areas. Applicant has

identified areas that lack high-quality coverage, that is, dead zones where citizens have inconsistent access to wireless network signals or where coverage is insufficient to allow mobile usage without dropped calls.

Use of support from Auction 901 will permit Applicant improve and expand coverage, and to cover operating and maintenance expenses expected in remote areas that are not expected to be cash flow positive for many years, if ever. In many areas where Applicant currently serves, consumers have access to data speeds that are insufficient to stream high quality video and transmit large files without significant delay. Installation of 4G service will significantly increase data speeds, well in excess of the 4/1 throughput requirement.

This will serve the public interest by allowing consumers to make more efficient use of high speed products and services, including smart phone devices, providing access to a wide variety of software applications. In every area where coverage is improved, rural citizens will see significant public safety benefits, as access to 911, E-911 and other important communications are all facilitated by improved connectivity in a mobile environment.

II. Project Timeline

MILESTONES	START	END
1. Network Design	[redacted]	[redacted]
2. Drafting, Posting of RFPs if applicable	[redacted]	[redacted]
3. Vendor Selection	[redacted]	[redacted]
4. Contract Negotiation if applicable	[redacted]	[redacted]
5. Construction	[redacted]	[redacted]
6. Meeting requirements for $$ Installments		
a.1st disbursement - upon award, no other requirements		6/15/2013
b. 2nd disbursement -		
i. report demonstrating 50% road miles covered		when 50% coverage attained
ii. 2nd LOC or increase to initial LOC to cover disbursement amount		when 50% coverage attained

c. 3rd/final disbursement -		
i. report demonstrating 75% road miles covered (3yrs for 4G)		Upon completion of construction

Applicant has already completed a preliminary network design, which has informed its bidding strategy. Upon grant of its application, Applicant will finalize its network design and budget, based on the then-current status of its network and then-current costs associated with purchasing the necessary equipment. Applicant employs radio-frequency engineers, as well as consulting engineers, to develop a final network design plan. Applicant expects that this process will take approximately four to six weeks.

Applicant is staging its construction project, ordering equipment, and beginning installations in a rapid but orderly fashion. Likewise, it is installing equipment needed to upgrade its backhaul and network core facilities, so that all new network equipment that is installed is capable of providing service immediately. Applicant has already selected its vendors and all contracting that was required has been completed.

Construction, installation and testing are expected to be complete within three years of the Auction 901 grant. The actual date of network deployment will vary depending upon a number of factors, including for example, equipment availability, cell site preparation, zoning and permitting approvals, weather and other factors discussed above. Nonetheless, Applicant expects it will achieve 75% or greater coverage and that it will complete its network construction on or about [redacted].

III. Statement of Technical Feasibility

These network deployments and improvements are all technically feasible because they represent an extension of Applicant's existing network, which has been providing service for a number of years. The projected cost of Applicant's project plan and necessary operating and maintenance expenses exceed the amount of Auction 901 support that it will receive, and the company is prepared to invest the additional capital needed to complete the project. It has undertaken a financial analysis of the technical feasibility of meeting the FCC's coverage requirements and based on that analysis, it has determined that the combination of support and internally generated capital will be sufficient.

Applicant understands that the FCC's Auction 901 funding commitment is limited to the winning bid amount, and that Applicant will be responsible for providing additional internally generated capital, if needed, to meet the Commission's coverage and service requirements.

Applicant has already successfully rolled out 4G LTE service in much of its existing network. Applicant has familiarity with the challenges of deploying 4G technology as well as established relationships with equipment and handset vendors. Applicant understands the challenges of deploying a high-speed data network in a rural area and is fully confident that the technology it has chosen is technically feasible and that it has the necessary expertise to deploy a technically capable network solution that meets the FCC's coverage and throughput requirements.

Applicant will purchase peripheral technologies such as battery back-ups and diesel generators to ensure that its new network equipment is sufficiently hardened to withstand natural and man-made disasters.

IV. Budget and Actual Spending Breakdown

Census Tract	County/State	Bid	Project Budget Total
T53059950200	Skamania, WA	$1,885,786.56	[redacted]

The following list specifically relates the budget to the costs for the activities in the project plan. Nonetheless, the project plan associated with this Census Tract is being undertaken jointly with the project plan associated with Winning Bid Census Tract No. T53059950500 (Skamania, WA). However, the project costs associated with this Census Tracts would be more than the project costs associated with Winning Bid Census Tract No. T53059950500 (Skamania, WA). Hence, sixty (60) percent of the collective projects costs have been allocated to this Census Tract.

USAC Category	Project Budget Detail	Budget - Cost to Complete	Costs Incurred as of 12/31/2014
Network Design	Network Design	In House	In House
Construction	[redacted]	[redacted]	[redacted]
Deployment	[redacted]	[redacted]	[redacted]
Maintenance	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]

The projected build plan set forth above, including costs and timeframes, are good-faith estimates based on current information and subject to change, depending on a variety of factors such as but not limited to terrain, zoning or other restriction on land usage, weather, and equipment availability from the selected vendors.

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Auction 901
FCC Form 690

FCC FORM 690 LINE 211: PROJECT STATUS DESCRIPTION

Project Description and Statement of Technical Feasibility

Winning Bid Census Tract No. T53059950500 (Skamania, WA)

SAC 528007

Total Bid Amount: $1,211,411.82

I. Project Summary

United States Cellular Corporation ("Applicant") currently provides wireless services in Washington. Applicant operates a 3G/4G wireless voice and data network incorporating state-of the-art technologies including CDMA [redacted] and 4G LTE (Long Term Evolution). For this particular winning bid census tract, Applicant plans to construct [redacted] new LTE cell site and overlay LTE on [redacted] existing cell site in order to provide coverage to the unserved qualifying roads in the eligible census blocks within the winning bid census tract.

Applicant plans to use [redacted] 4G LTE technology to provide the required service. LTE incorporates Multiple In Multiple Out (MIMO) technology, the Orthogonal Frequency Division Multiple Access (OFDMA) air interface in the downlink and Single Carrier FDMA in the uplink. This combination provides high levels of spectral efficiency and network performance, coupled with high network capacity and low latency [redacted] 4G LTE.

Installation of a new cell site and the overlay of LTE on an existing cell site will enable Applicant to meet its public interest obligations to provide rural citizens with access to advanced telecommunications and information technologies that are reasonably comparable to those

available in urban areas. Applicant has identified areas that lack high-quality coverage, that is, dead zones where citizens have inconsistent access to wireless network signals or where coverage is insufficient to allow mobile usage without dropped calls.

Use of support from Auction 901 will permit Applicant improve and expand coverage, and to cover operating and maintenance expenses expected in remote areas that are not expected to be cash flow positive for many years, if ever. In many areas where Applicant currently serves, consumers have access to data speeds that are insufficient to stream high quality video and transmit large files without significant delay. Installation of 4G service will significantly increase data speeds, well in excess of the 4/1 throughput requirement.

This will serve the public interest by allowing consumers to make more efficient use of high speed products and services, including smart phone devices, providing access to a wide variety of software applications. In every area where coverage is improved, rural citizens will see significant public safety benefits, as access to 911, E-911 and other important communications are all facilitated by improved connectivity in a mobile environment.

II. Project Timeline

MILESTONES	START	END
1. Network Design	[redacted]	[redacted]
2. Drafting, Posting of RFPs if applicable	[redacted]	[redacted]
3. Vendor Selection	[redacted]	[redacted]
4. Contract Negotiation if applicable	[redacted]	[redacted]
5. Construction	[redacted]	[redacted]
6. Meeting requirements for $$ Installments		
a.1st disbursement - upon award, no other requirements		6/15/2013
b. 2nd disbursement -		
i. report demonstrating 50% road miles covered		when 50% coverage attained
ii. 2nd LOC or increase to initial LOC to cover disbursement amount		when 50% coverage attained

c. 3rd/final disbursement -		
i. report demonstrating 75% road miles covered (3yrs for 4G)		[redacted]

Applicant has completed a preliminary network design, which has informed its bidding strategy. Upon grant of its application, Applicant will finalize its network design and budget, based on the then-current status of its network and then-current costs associated with purchasing the necessary equipment. Applicant employs radio-frequency engineers, as well as consulting engineers, to develop a final network design plan. Applicant expects that this process will take approximately four to six weeks.

Applicant is in the midst of its construction project, ordering equipment, and managing installations in a rapid but orderly fashion. Likewise, it is installing equipment needed to upgrade its backhaul and network core facilities, so that all new network equipment that is installed is capable of providing service immediately. Applicant selected its vendors and all contracting that was required has been completed.

Construction, installation and testing are expected to be complete by [redacted]. The actual date of network deployment will vary depending upon a number of factors, including for example, equipment availability, cell site preparation, zoning and permitting approvals, weather and other factors discussed above. Nonetheless, Applicant expects it will achieve 75% or greater coverage and that it will complete its network construction on or about [redacted].

III. Statement of Technical Feasibility

These network deployments and improvements are all technically feasible because they represent an extension of Applicant's existing network, which has been providing service for a number of years. The projected cost of Applicant's project plan and necessary operating and maintenance expenses exceed the amount of Auction 901 support that it will receive, and the company is prepared to invest the additional capital needed to complete the project. It has undertaken a financial analysis of the technical feasibility of meeting the FCC's coverage requirements and based on that analysis, it has determined that the combination of support and internally generated capital will be sufficient.

Applicant understands that the FCC's Auction 901 funding commitment is limited to the winning bid amount, and that Applicant will be responsible for providing additional internally generated capital, if needed, to meet the Commission's coverage and service requirements.

Applicant has already successfully rolled out 4G LTE service in much of its existing network. Applicant has familiarity with the challenges of deploying 4G technology as well as established relationships with equipment and handset vendors. Applicant understands the challenges of deploying a high-speed data network in a rural area and is fully confident that the technology it has chosen is technically feasible and that it has the necessary expertise to deploy a technically capable network solution that meets the FCC's coverage and throughput requirements.

Applicant will purchase peripheral technologies such as battery back-ups and diesel generators to ensure that its new network equipment is sufficiently hardened to withstand natural and man-made disasters.

IV. Budget and Actual Spending Breakdown

Census Tract	County/State	Bid	Project Budget Total
T53059950500	Skamania, WA	$1,211,411.82	[redacted]

The following list specifically relates the budget to the costs for the activities in the project plan. Nonetheless, the project plan associated with this Census Tract is being undertaken jointly with the project plan associated with Winning Bid Census Tract No. T53059950200 (Skamania, WA). However, the project costs associated with this Census Tracts would be less than the project costs associated with Winning Bid Census Tract No. T53059950200 (Skamania, WA). Hence, only forty (40) percent of the collective projects costs have been allocated to this Census Tract.

USAC Category	Project Budget Detail	Budget - Cost to Complete	Costs Incurred as of 12/31/2014
Network Design	Network Design	In House	In House
Construction	[redacted]	[redacted]	[redacted]
Deployment	[redacted]	[redacted]	[redacted]
Maintenance	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]

The projected build plan set forth above, including costs and timeframes, are good-faith estimates based on current information and subject to change, depending on a variety of factors such as but not limited to terrain, zoning or other restriction on land usage, weather, and equipment availability from the selected vendors.