

UNITED STATES BANKRUPTCY COURT
SOUTHERN DISTRICT OF NEW YORK

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In re: : Chapter 11
: :
WINDSTREAM HOLDINGS, INC., *et al.*,¹ : Case No. 19-22312 (RDD)
: :
Debtors. : (Jointly Administered)
: :
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**SECOND AND FINAL FEE APPLICATION OF ALTMAN VILANDRIE & COMPANY
AS TELECOM SERVICES CONSULTANTS FOR ALLOWANCE OF
COMPENSATION AND REIMBURSEMENT OF OUT-OF-POCKET EXPENSES
INCURRED FOR THE PERIOD OF APRIL 16, 2020 TO JUNE 26, 2020**

SUMMARY SHEET

Name of Applicant:	Altman Vilandrie & Company
Authorized to Provide Services to:	Debtors and Debtors in Possession
Date of Retention:	Order entered on August 2, 2019 approving retention <i>nunc pro tunc</i> to February 25, 2019 [Docket No. 887]
Period for Which Compensation and Expense Reimbursement is sought:	April 16, 2020 through June 26, 2020
Amount of Compensation Requested:	\$1,262,196
Amount of Expense Reimbursement Requested:	\$7,589
Total Compensation and Expense Reimbursement Requested:	\$1,269,785

This is the second and final application.

¹ The last four digits of Debtor Windstream Holdings, Inc.'s tax identification number are 7717. Due to the large number of Debtors in these chapter 11 cases, for which joint administration has been granted, a complete list of the debtor entities and the last four digits of their federal tax numbers is not provided herein. A complete list of such information may be obtained on the website of the Debtors' claims and noticing agent at <http://www.kcccl.net/windstream>. The location of the Debtors' service address for purposes of these chapter 11 cases is: 4001 North Rodney Parham Road, Little Rock, Arkansas 72212.



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AS TELECOM SERVICES CONSULTANTS FOR ALLOWANCE OF
COMPENSATION AND REIMBURSEMENT OF OUT-OF-POCKET EXPENSES
INCURRED FOR THE PERIOD OF APRIL 16, 2020 TO JUNE 26, 2020**

Altman Vilandrie & Company (“AV&Co.”)² hereby submits its second and final fee application (the “Fee Application”), seeking compensation for additional services rendered and reimbursement of expenses incurred for the period from April 16, 2020 through June 26, 2020 (the “Retention Period”). By this Fee Application, AV&Co. seeks payment in the amount of \$1,269,785 which comprises (i) 100% of the total amount of compensation sought for actual and necessary services rendered during the Retention Period and (ii) reimbursement of 100% of actual and necessary expenses incurred in connection with such services.

Background

1. On February 25, 2019 (the “Petition Date”), each of the Debtors filed a voluntary petition for relief under chapter 11 of title 11 of the United States Code (the “Bankruptcy Code”). The debtors and debtors-in-possession (collectively, the “Debtors”) are operating their businesses

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² On July 8, 2020, AV&Co. and Solon Management Consulting merged to create Altman Solon.

and managing their properties as debtors-in-possession pursuant to §§ 1107(a) and 1108 of the Bankruptcy Code.

2. On July 12, 2019, the Debtors filed the *Debtors' Application Authorizing and Approving the Employment and Retention of Altman Vilandrie & Company as Telecom Services Consultants Effective Nunc Pro Tunc to the Petition Date and Motion to File Under Seal Certain Confidential Client Information* [Docket No. 807] (the "Retention Application"), pursuant to which the Debtors sought authority to retain and employ AV&Co. as their telecom services consultant, in accordance with the terms and conditions set forth in an engagement letter (the "Original Engagement Letter") dated July 11, 2019. A copy of the Original Engagement Letter was attached to the Retention Application.

3. On August 2, 2019, this Court entered the *Order Authorizing the Employment and Retention of Altman Vilandrie & Company as Telecom Services Consultants Effective Nunc Pro Tunc to the Petition Date* [Docket No. 887] (the "Retention Order") approving the Retention Application and authorizing the retention and employment of AV&Co. *nunc pro tunc* to the Petition Date, pursuant to the terms of the Engagement Letter.

4. On April 22, 2019, this Court entered the *Order Establishing Procedures for Interim Compensation and Reimbursement of Expenses for Retained Professionals* [Docket No. 374] (the "Interim Compensation Order") establishing procedures for interim compensation and reimbursement of expenses for professionals.

5. On December 16, 2019, AV&Co. submitted its first fee application requesting allowance of \$1,021,000 in professional fees earned for services provided for the period of July 1, 2019 to November 30, 2019 and out-of-pocket expenses related to those services in the amount of \$76,304.18 [Docket No. 1329] (the "First Fee Application"). At the time, AV&Co. was of the

understanding it had concluded its services related to improving the Debtors' operations and telecommunications strategy and submitted the First Fee Application as a final fee application.

6. On February 14, 2020, this Court entered the *Omnibus Order Granting Fee Applications of Professionals for Allowance and Payment of Compensation for Professional Services Rendered and for Reimbursement of Actual and Necessary Expenses* [Docket No. 1507] (the "Fee Application Order") granting the First Fee Application and directing and authorizing the Debtors to remit payment to AV&Co.

7. AV&Co. has since been retained by the Debtors for additional services. On April 13, 2020, the Debtors and AV&Co. entered into a supplemental engagement letter (the "First Supplemental Engagement Letter"). Pursuant to the Retention Order, the Debtors filed the *Notice of Supplemental Engagement Letter of Altman Vilandrie & Company as Telecom Services Consultants to the Debtors* [Docket No. 1693], attaching the First Supplemental Engagement Letter.

8. On June 5, 2020, the Debtors and AV&Co. entered into another supplemental engagement letter (the "Second Supplemental Engagement Letter" and together with the First Supplement Engagement Letter, the "Supplemental Engagement Letters"). Pursuant to the Retention Order, the Debtors filed the *Notice of Supplemental Engagement Letter of Altman Vilandrie & Company as Telecom Services Consultants to the Debtors* [Docket No. 2014], attaching the Second Supplemental Engagement Letter. No objections were filed to the Supplemental Engagement Letters.

9. AV&Co. hereby submits its Fee Application requesting allowance of (a) professional fees earned for additional services provided during the Retention Period related to improving the Debtors' operations and telecommunications strategy, and (b) out-of-pocket

expenses related to those services. Because this is a final fee application, approval and payment of the entire amounts incurred by AV&Co. and owing by the Debtors is appropriate at this time

10. Services and out-of-pocket expenses for which compensation and reimbursement are sought were rendered and incurred by AV&Co. on behalf of the Debtors pursuant to section 327 of the Bankruptcy Code.

The AV&Co. Engagement

11. Pursuant to the Supplemental Engagement Letters, AV&Co. was retained to provide the following additional telecom consulting services (the “Additional Services”):

a. Support services related to the upcoming Rural Digital Opportunity Fund (“RDOF”) auction.

12. Pursuant to the First Supplemental Engagement Letter, the Debtors agreed to pay AV&Co. a fee of \$85,000 per week for a team of three consultants, oversight from three senior consultants, and intermittent specialist time for services related to the RDOF auction. During the Retention Period, AV&Co. professionals providing the Additional Services recorded their time in half-hourly increments.

13. In addition, the Debtors were obligated to pay an additional and necessary charge of \$90,000 for the use of AV&Co.’s proprietary Automated Route Optimizer technology (the “ARO”). The cost of the ARO was actual and necessary for the provision of the Additional Services to the Debtors and a cost routinely charged to other clients of AV&Co. This charge is included in the fees.

14. Pursuant to the Second Supplemental Engagement Letter, the Debtors agreed to pay AV&Co. a flat fee of \$75,000 for a team of two consultants, oversight from three senior consultants, and intermittent specialist time for services related to network planning.

15. In addition to the fees set forth above, pursuant to the Supplemental Engagement Letters, the Debtors were obligated to pay AV&Co. an amount equal to 5% of professional fees to cover the analytical tools and software, data sets, and technology costs associated with the provision of the Additional Services. These fees were actual and necessary to cover the use of such tool and covered specific research and technology capabilities that were paid for by AV&Co. and regularly used on AV&Co. projects but were difficult to track on a per project basis. These costs are also routinely charged to other clients of AV&Co. Summaries of out-of-pocket expenses incurred by AV&Co. during the Retention Period are attached hereto as **Exhibit A**. The total amount of expenses AV&Co. is seeking includes the out-of-pocket expenses and the 5% fee.

16. The First Supplemental Engagement Letter estimated that the engagement for services related to the RDOF auction would take 11 to 12 weeks, and AV&Co.'s retention was scheduled to begin on April 13, 2020. The engagement ultimately required 13 weeks to complete. The additional week was needed to address additional requests from the Debtors and also to prepare responses for the Debtors to information requests from creditors that were not in the original scope of work. The Second Supplemental Engagement Letter estimated that the engagement for services related to network planning would take 2 to 2.5 weeks, and AV&Co.'s retention was scheduled to begin on June 8, 2020. However, the engagement required 4 weeks to complete as additional time and effort were needed to finalize AV&Co.'s analyses that was not anticipated by AV&Co. or the Debtors at the outset of the project. The Debtors have agreed to AV&Co.'s additional time needed to complete both engagements.

17. Invoices detailing the fees earned and expenses incurred by AV&Co. during the Retention Period are attached hereto as **Exhibit B**. To date, the Debtors have not paid AV&Co. on account of those invoices.

The AV&Co. Team

18. The Additional Services were performed primarily by the following consultants at AV&Co.: Roy Altman, Director; Annabel Chyung, Analyst; Matthew Del Percio, Principal; Patrick Goss, AIT Manager; Daniel Granoff, Manager; Jeffrey Johnson, Consultant; Imad Kazim, AIT Consultant; Tom Lee, AIT Consultant; Adam Musial, Consultant; Mary Yarbrough, Sr. Advisor; Kyle Archer, Senior Analyst; Christina Kilgariff, Senior Analyst; Jeremiah Link, Analyst; David Paasche, Analyst, and Adalberto Cubillo, Analyst.

19. A summary of hours expended by AV&Co. professionals during the Retention Period is provided below:

Professional	Title	Hours
Rory Altman	Director	28
Annabel Chung	Analyst	40.5
Matthew Del Percio	Principal	59
Patrick Goss	AIT Manager	5
Daniel Granoff	Manager	291
Jeffrey Johnson	Consultant	482.5
Imad Kazim	AIT Consultant	72
Tom Lee	AIT Consultant	7.8
Adam Musial	Consultant	139
Mary Yarbrough	Sr. Advisor	16
Kyle Archer	Sr. Analyst	606
Christina Kilgariff	Sr. Analyst	499
Jeremiah Link	Analyst	524
David Paasche	Analyst	127.5
Adalberto Cubillo	Analyst	121.5
Total Hours		3,018.8

20. Daily time records of AV&Co. professionals for the Retention Period setting forth the hours expended each day along with a narrative description of the Additional Services performed that day are attached hereto as **Exhibit C**.

21. AV&Co. respectfully submits that the compensation requested for the Additional Services rendered by AV&Co. to the Debtors during the Retention Period is fully justified and reasonable based upon (a) the complexity of the issues presented, (b) the skill necessary to perform services properly, (c) the customary fees charged to clients in non-bankruptcy situations for similar services rendered, (d) time constraints required by the exigencies of the case, and (e) the experience, reputation and ability of the professionals rendering services. AV&Co. is a leading strategy consulting firm that specializes in the telecommunications, media, and technology (TMT) industries, the industry in which the Debtors operate. It brought that expertise to bear in providing the Services to the Debtors and expended significant time providing those services. In addition, the compensation arrangements entered into between AV&Co. and the Debtors were consistent with, and typical of, arrangements entered into by AV&Co. and other professional services firms of comparable expertise and experience for engagements of similar size and complexity.

22. AV&Co. respectfully submits that the additional services it has rendered to the Debtors have been necessary and in the best interest of the Debtors and their estates. AV&Co. provided a comprehensive network upgrade strategy for the Debtors' business. As part of this strategy, the Debtors are planning to bid in the Federal Communications Commission's upcoming RDOF auction. In connection with this, AV&Co. assisted the Debtors in determining the costs and returns and bidding strategies for building in RDOF-eligible census blocks and providing related support during the upcoming auction. AV&Co. further assisted the Debtors with network planning in various geographies where the Debtors are considering upgrades. The Additional Services rendered by AV&Co. was built off the work it did pursuant to the Original Engagement Letter, whereby it assisted the Debtors in identifying those areas to prioritize for network

investment, created a financial model that estimates the impact of such investment and used ARO, a unique and proprietary tool, to determine the optimal extent of network upgrade for Windstream.

23. In light of the foregoing, AV&Co. respectfully submits that under the criteria normally examined in Chapter 11 reorganization cases, the compensation requested by AV&Co. is reasonable in light of the work performed in connection with these cases.

Notice

24. Notice of this Fee Application has been served onto the Application Recipients, as defined in the Interim Compensation Order.

Requested Relief

WHEREFORE, AV&Co. respectfully requests that the Court (a) approve this final Fee Application; (b) authorize and direct Debtors to pay AV&Co. in the amount of \$1,269,785, which comprises (i) 100% of the total amount of compensation sought for actual and necessary services rendered during the Retention Period and (ii) reimbursement of 100% of actual and necessary expenses incurred in connection with such services; and (c) grant such other and further relief as the Court deems just and proper.

Dated: New York, New York
August 10, 2020

FOLEY HOAG LLP

By: /s/ Kenneth S. Leonetti

Kenneth S. Leonetti

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Attorneys for AV&Co.

Exhibit A

Summary of Expenses

Unbilled Expenses by Project

All Transactions

Windstream Holdings, Inc.

WIN006 - RDOF Strategy

Source Name	Type	Date	Memo	Account	Amount
Adam Musial (V)	Bill	04/21/2020	AVCo meal allowance: dinner	6313 - Meals - In Office (Client)	35.00
Adam Musial (V)	Bill	05/05/2020	AVCo meal allowance: dinner	6313 - Meals - In Office (Client)	35.00
Adam Musial (V)	Bill	05/05/2020	AVCo meal allowance: dinner	6313 - Meals - In Office (Client)	35.00
Adam Musial (V)	Bill	05/05/2020	AVCo meal allowance: dinner	6313 - Meals - In Office (Client)	35.00
Adam Musial (V)	Bill	05/19/2020	AVCo meal allowance: dinner	6313 - Meals - In Office (Client)	35.00
Amex NV	Bill	05/12/2020	Amazon Web Services: ARO	6330 - Research Expenses (Client)	1,525.00
Christina Kilgariff (V)	Bill	05/05/2020	AVCo meal allowance: Dinner workin	6313 - Meals - In Office (Client)	35.00
Christina Kilgariff (V)	Bill	05/05/2020	AVCo meal allowance: Dinner workin	6313 - Meals - In Office (Client)	35.00
Christina Kilgariff (V)	Bill	05/05/2020	AVCo meal allowance: Dinner workin	6313 - Meals - In Office (Client)	35.00
Christina Kilgariff (V)	Bill	05/05/2020	AVCo meal allowance: Dinner workin	6313 - Meals - In Office (Client)	35.00
Christina Kilgariff (V)	Bill	05/20/2020	AVCo meal allowance: dinner	6313 - Meals - In Office (Client)	35.00
Christina Kilgariff (V)	Bill	05/20/2020	AVCo meal allowance: dinner	6313 - Meals - In Office (Client)	35.00
Christina Kilgariff (V)	Bill	05/20/2020	AVCo meal allowance: dinner	6313 - Meals - In Office (Client)	35.00
Christina Kilgariff (V)	Bill	05/20/2020	AVCo meal allowance: dinner	6313 - Meals - In Office (Client)	35.00
Christina Kilgariff (V)	Bill	06/03/2020	AVCo meal allowance: dinner	6313 - Meals - In Office (Client)	35.00
Christina Kilgariff (V)	Bill	06/03/2020	AVCo meal allowance: dinner	6313 - Meals - In Office (Client)	35.00
Christina Kilgariff (V)	Bill	06/16/2020	Chopt: Dinner - Working Late	6313 - Meals - In Office (Client)	23.76
Christina Kilgariff (V)	Bill	06/16/2020	Chopt: Dinner - Working Late	6313 - Meals - In Office (Client)	23.02
Christina Kilgariff (V)	Bill	06/16/2020	Eden Wok: Dinner - Working Late	6313 - Meals - In Office (Client)	23.16
Christina Kilgariff (V)	Bill	06/16/2020	Chopt: Dinner - Working Late	6313 - Meals - In Office (Client)	23.76
Jeremiah Link (V)	Bill	06/09/2020	Soup Shack: dinner on 12+ hour day	6313 - Meals - In Office (Client)	29.62
Jeremiah Link (V)	Bill	06/09/2020	Tamarind Thai: dinner on 12+ hour da	6313 - Meals - In Office (Client)	17.06
Jeremiah Link (V)	Bill	06/09/2020	Gyu-Kaku: dinner on 12+ hour day	6313 - Meals - In Office (Client)	18.98
Jeremiah Link (V)	Bill	06/09/2020	Thai Place: dinner on 12+ hour day	6313 - Meals - In Office (Client)	35.00
Jeremiah Link (V)	Bill	06/09/2020	A@Time: dinner on 12+ hour day	6313 - Meals - In Office (Client)	28.55
Kyle Archer (V)	Bill	05/04/2020	Beantown Taqueria: Dinner	6313 - Meals - In Office (Client)	30.11
Kyle Archer (V)	Bill	05/04/2020	Surya Indian Kitchen: Dinner	6313 - Meals - In Office (Client)	34.03
Kyle Archer (V)	Bill	05/04/2020	Domino's Pizza: Dinner	6313 - Meals - In Office (Client)	29.36
Kyle Archer (V)	Bill	05/04/2020	Domino's Pizza: Dinner	6313 - Meals - In Office (Client)	29.36
Kyle Archer (V)	Bill	06/01/2020	Domino's Pizza: Dinner	6313 - Meals - In Office (Client)	30.14
Kyle Archer (V)	Bill	06/01/2020	Dig Inn: Dinner	6313 - Meals - In Office (Client)	31.10

Unbilled Expenses by Project

All Transactions

Source Name	Type	Date	Memo	Account	Amount
Kyle Archer (V)	Bill	06/01/2020	5/11/2020: Tatte Bakery & Cafe: Dinner	6313 - Meals - In Office (Client)	33.00
Kyle Archer (V)	Bill	06/01/2020	5/12/2020: AVCo meal allowance: Dinner	6313 - Meals - In Office (Client)	35.00
Kyle Archer (V)	Bill	06/01/2020	5/14/2020: Domino's Pizza: Dinner	6313 - Meals - In Office (Client)	29.36
Kyle Archer (V)	Bill	06/01/2020	5/26/2020: AVCo meal allowance: Dinner	6313 - Meals - In Office (Client)	35.00
Total WIN006 - RDOF Strategy					2,589.37

Windstream Holdings, Inc.
WIN006 - RDOF Strategy

Source Name	Type	Date	Memo	Account	Amount
Christina Kilgariff (V)	Bill	07/01/2020	6/16/2020: Taco Bell: Dinner on 12+ hour day	6313 - Meals - In Office (Client)	16.18
Christina Kilgariff (V)	Bill	07/01/2020	6/22/2020: Chopt: Dinner on 12+ hour day	6313 - Meals - In Office (Client)	20.59
Christina Kilgariff (V)	Bill	07/01/2020	6/23/2020: TownHouse Diner: Dinner on 12+ hour day	6313 - Meals - In Office (Client)	23.78
Christina Kilgariff (V)	Bill	07/01/2020	6/24/2020: Just Salad: Dinner on 12+ hour day	6313 - Meals - In Office (Client)	25.97
Daniel Granoff (V)	Bill	07/06/2020	5/7/2020: AVCo meal allowance: work meal	6313 - Meals - In Office (Client)	35.00
Daniel Granoff (V)	Bill	07/06/2020	5/13/2020: AVCo meal allowance: work meal	6313 - Meals - In Office (Client)	35.00
Daniel Granoff (V)	Bill	07/06/2020	5/21/2020: AVCo meal allowance: work meal	6313 - Meals - In Office (Client)	35.00
Daniel Granoff (V)	Bill	07/06/2020	5/26/2020: AVCo meal allowance: work meal	6313 - Meals - In Office (Client)	35.00
Kyle Archer (V)	Bill	07/14/2020	6/24/2020: Surya Indian Kitchen: Dinner	6313 - Meals - In Office (Client)	26.90
Morgan, Lewis & Bockius LLP	Bill	06/24/2020	RDOF auction	6328 - Legal Fees (Client)	1,606.50
TriLumen Inc.	Bill	06/17/2020	Ron Valdez CBRS FWA tech	6305 - Contractors - Prof (Client)	2,750.00
TriLumen Inc.	Bill	06/17/2020	Andrew Merson CBRS FWA tech	6305 - Contractors - Prof (Client)	250.00
Google	Bill	06/25/2020	Google Images	6330 - Research Expenses (Client)	5,000.00
Total WIN006 - RDOF Strategy					9,859.92

Exhibit B

Invoices



101 Federal Street
28th Floor
Boston, MA 02110

Invoice for Professional Services

Date 5/30/2020
Invoice # 4288
Period April - May, 2020

Client

Windstream Holdings, Inc.
4001 N Rodney Parham Road
Little Rock, Arkansas 72212

Project WIN006 - RDOF Strategy

Project # WIN006

Description	Amount
Professional Fees	618,248.75
ARO Software Technology	54,000.00
Research and Technolgy Fee (5% of Professional Fees)	30,912.44
Total Reimbursable Expenses	2,589.37

Payment Terms: Net 30
WIRE and EFT/ACH Payments to:
Altman Vilandrie & Company
KeyBank
ABA # 011200608
Account # 199681027413
Swift Code KEYBUS33

Remit checks to:
Altman Vilandrie & Company
101 Federal Street, 28th Floor
Boston, MA 02110
TIN: 05-0524931
Phone # 617.753.7200
E-mail lorlandino@altvil.com

Total \$705,750.56

Payments/Credits \$0.00

Balance Due (USD)	\$705,750.56
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101 Federal Street
28th Floor
Boston, MA 02110

Invoice for Professional Services

Date 6/26/2020
Invoice # 4323
Period June, 2020

Client

Windstream Holdings, Inc.
4001 N Rodney Parham Road
Little Rock, Arkansas 72212

Project WIN006 - RDOF Strategy

Project # WIN006

Description	Amount
Professional Fees - 6/1/2020 - 6/26/2020:	
FTTP Prioritization	53,538.00
RDOF Strategy	316,751.25
Project Vision	115,000.00
Research and Technology Fee (5% of Professional Fees)	24,264.46
ARO Software Technology	36,000.00
Total Reimbursable Expenses	9,859.92

Payment Terms: Net 30
WIRE and EFT/ACH Payments to:
Altman Vilandrie & Company
KeyBank
ABA # 011200608
Account # 199681027413
Swift Code KEYBUS33

Remit checks to:
Altman Vilandrie & Company
101 Federal Street, 28th Floor
Boston, MA 02110
TIN: 05-0524931
Phone # 617.753.7200
E-mail lorlandino@altvil.com

Total \$555,413.63

Payments/Credits \$0.00

Balance Due (USD)	\$555,413.63
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Exhibit C

Time Records

Professional	Date	Hours	Activities
Altman, Rory	23-Mar-20	1.5	Initial meeting with stakeholders and team debrief
Altman, Rory	30-Mar-20	0.5	Met with team to review progress
Altman, Rory	6-Apr-20	1.0	Met with team to review progress
Altman, Rory	7-Apr-20	1.0	Met with team to review progress
Altman, Rory	8-Apr-20	1.0	Met with team to review progress
Altman, Rory	9-Apr-20	1.0	Met with team to review progress
Altman, Rory	10-Apr-20	1.0	Met with team to review progress
Altman, Rory	13-Apr-20	1.0	Meeting with client
	Full Summary	8.0	

Professional	Date	Hours	Activities
Altman, Rory	20-Apr-20	1.0	Internal team kickoff
Altman, Rory	6-May-20	1.0	Meeting with working team on progress
Altman, Rory	7-May-20	2.0	Meeting with client
Altman, Rory	13-May-20	1.5	Meeting with working team on progress
Altman, Rory	14-May-20	1.0	Meeting with client
Altman, Rory	20-May-20	1.0	Meeting with client
Altman, Rory	28-May-20	1.0	Meeting with working team on progress
Altman, Rory	29-May-20	1.0	Meeting with client
Altman, Rory	3-Jun-20	2.0	Meeting with client
Altman, Rory	8-Jun-20	1.0	Meeting with working team on progress
Altman, Rory	10-Jun-20	1.0	Meeting with working team on progress
Altman, Rory	12-Jun-20	0.5	Meeting with working team on progress
Altman, Rory	16-Jun-20	0.5	Meeting with working team on progress
Altman, Rory	17-Jun-20	2.0	Meeting with client
Altman, Rory	24-Jun-20	1.0	Meeting with working team on progress
Altman, Rory	25-Jun-20	2.5	Meeting with client
	Full Summary	20.0	

Professional	Date	Hours	Activities
Chung, Annabel	30-Mar-20	12.5	Market analysis and case study creation
Chung, Annabel	31-Mar-20	9.0	Refinement of analysis and cost inputs and assumptions
Chung, Annabel	1-Apr-20	10.0	Running additional analysis scenarios and creating output slides
Chung, Annabel	2-Apr-20	9.0	Finalization of analysis and scenarios, refinement of slides
	Full Summary	40.5	

Professional	Date	Hours	Activities
Granoff, Daniel	23-Mar-20	1.0	Initial meeting with stakeholders
Granoff, Daniel	24-Mar-20	2.0	Run analysis on request from stakeholders
Granoff, Daniel	25-Mar-20	1.0	Review progress and provide feedback
Granoff, Daniel	26-Mar-20	1.0	Review progress and provide feedback
Granoff, Daniel	27-Mar-20	2.0	Re-engage with WIN team on findings and recommendations
Granoff, Daniel	30-Mar-20	1.0	Review progress and provide feedback
Granoff, Daniel	31-Mar-20	2.0	Review progress and provide feedback
Granoff, Daniel	1-Apr-20	1.0	Review progress and provide feedback
Granoff, Daniel	2-Apr-20	1.0	Review progress and provide feedback
Granoff, Daniel	3-Apr-20	2.5	Review progress and provide feedback
Granoff, Daniel	13-Apr-20	4.0	Longer meeting with WIN team and stakeholders
Granoff, Daniel	14-Apr-20	2.0	Review progress and provide feedback
Granoff, Daniel	15-Apr-20	2.0	Review progress and provide feedback
Granoff, Daniel	16-Apr-20	2.0	Review progress and provide feedback
Full Summary			24.5

Professional	Date	Hours	Activities
Granoff, Daniel	13-Apr-20	2.0	Kickoff of internal work
Granoff, Daniel	14-Apr-20	1.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	15-Apr-20	1.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	16-Apr-20	1.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	17-Apr-20	1.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	20-Apr-20	2.5	Onboarded additional team members
Granoff, Daniel	21-Apr-20	4.0	Internal team kickoff
Granoff, Daniel	22-Apr-20	4.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	23-Apr-20	4.0	Kickoff meeting with client
Granoff, Daniel	24-Apr-20	4.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	27-Apr-20	5.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	28-Apr-20	5.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	29-Apr-20	5.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	30-Apr-20	5.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	1-May-20	4.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	4-May-20	5.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	5-May-20	5.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	6-May-20	5.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	7-May-20	6.0	Reviewed interim progress with Windstream stakeholders
Granoff, Daniel	8-May-20	4.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	11-May-20	6.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	12-May-20	6.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	13-May-20	8.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	14-May-20	6.0	Reviewed interim progress with Windstream stakeholders
Granoff, Daniel	15-May-20	3.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	18-May-20	5.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	19-May-20	5.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	20-May-20	5.0	Reviewed interim progress with Windstream stakeholders
Granoff, Daniel	21-May-20	5.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	22-May-20	4.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	26-May-20	6.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	27-May-20	5.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	28-May-20	6.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	29-May-20	4.0	Reviewed interim progress with Windstream stakeholders
Granoff, Daniel	1-Jun-20	5.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	2-Jun-20	5.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	3-Jun-20	5.0	Reviewed interim progress with Windstream stakeholders
Granoff, Daniel	4-Jun-20	7.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	5-Jun-20	5.5	Reviewed team progress and gave feedback on next steps

Granoff, Daniel	8-Jun-20	5.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	9-Jun-20	5.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	10-Jun-20	5.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	11-Jun-20	5.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	12-Jun-20	5.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	15-Jun-20	5.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	16-Jun-20	5.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	17-Jun-20	5.0	Reviewed interim progress with Windstream stakeholders
Granoff, Daniel	18-Jun-20	5.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	19-Jun-20	3.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	22-Jun-20	5.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	23-Jun-20	5.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	24-Jun-20	5.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	25-Jun-20	5.0	Reviewed interim progress with Windstream stakeholders
Granoff, Daniel	26-Jun-20	4.0	Reviewed team progress and gave feedback on next steps
	Full Summary	247.0	

Professional	Date	Hours	Activities
Granoff, Daniel	8-Jun-20	1.5	Kicked off project work
Granoff, Daniel	9-Jun-20	1.5	Reviewed initial workplan
Granoff, Daniel	10-Jun-20	1.5	Provided feedback on initial plan
Granoff, Daniel	11-Jun-20	1.5	Internal review of initial output
Granoff, Daniel	12-Jun-20	1.5	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	15-Jun-20	1.5	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	16-Jun-20	1.5	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	17-Jun-20	1.5	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	18-Jun-20	1.5	Met with WIN stakeholders to review output
Granoff, Daniel	19-Jun-20	1.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	22-Jun-20	1.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	23-Jun-20	1.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	24-Jun-20	1.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	25-Jun-20	1.0	Reviewed team progress and gave feedback on next steps
Granoff, Daniel	26-Jun-20	1.0	Reviewed team progress and gave feedback on next steps
	Full Summary	19.5	

Professional	Date	Hours	Activities
Johnson, Jeffrey	13-Apr-20	2.0	Project discussion and data gathering
Johnson, Jeffrey	14-Apr-20	6.5	Compiled summary recommendation results; drafted responses to client requests
Johnson, Jeffrey	15-Apr-20	11.0	Iterated on responses to client requests
Johnson, Jeffrey	16-Apr-20	4.0	Compiled specific area case study results to support recommendations
	Full Summary	23.5	

Professional	Date	Hours	Activities
Johnson, Jeffrey	20-Apr-20	7.5	Reviewed scope document, drafted team workplan, reviewed data provided by client
Johnson, Jeffrey	21-Apr-20	10.5	Internal Team Kickoff; Drafted slides for client kickoff
Johnson, Jeffrey	22-Apr-20	10.0	Iterated on slides for client kickoff; attended internal team meetings re: network modeling process
Johnson, Jeffrey	23-Apr-20	12.0	Kickoff meeting with client; reviewed internal model, attended internal team meetings
Johnson, Jeffrey	24-Apr-20	8.0	Reviewed competitor analysis from CAF II auction, reviewed initial network modeling output
Johnson, Jeffrey	27-Apr-20	10.5	Participated in internal discussions re: network modeling and competitive analysis
Johnson, Jeffrey	28-Apr-20	10.0	Reviewed network modeling software output and post-processing files and process
Johnson, Jeffrey	29-Apr-20	9.0	Internal discussions re: competitive analysis, network modeling, RDOF rules and procedures
Johnson, Jeffrey	30-Apr-20	14.0	Reviewed client data, external correspondence, attended internal meetings to troubleshoot network modeling software
Johnson, Jeffrey	1-May-20	7.0	Attended internal team meetings, reviewed updated network modeling output
Johnson, Jeffrey	2-May-20	0.5	Internal team administration
Johnson, Jeffrey	4-May-20	9.0	Attended internal meetings, drafted slides for client meeting
Johnson, Jeffrey	5-May-20	15.0	Iterated on slides for client meeting; attended FCC webinar on RDOF; attended internal team meetings
Johnson, Jeffrey	6-May-20	11.5	Iterated on slides for client meeting; reviewed output from team; client communications
Johnson, Jeffrey	7-May-20	9.0	Internal review of key model inputs, finalized materials for client meeting; attended client meeting
Johnson, Jeffrey	8-May-20	7.5	Attended internal team administration meetings; reviewed network modeling process and outputs
Johnson, Jeffrey	11-May-20	10.5	Reviewed internal models and Tech X and Tech Y assumptions
Johnson, Jeffrey	12-May-20	9.5	Reviewed Tech X modeling process; internal meetings re: competitor behavior modeling; client emails
Johnson, Jeffrey	13-May-20	10.0	Tech X network modeling review; reviewed internal model assumptions; iterated on slides for client meeting
Johnson, Jeffrey	14-May-20	11.5	Client meeting; Internal discussions on Tech X modeling and assumptions
Johnson, Jeffrey	15-May-20	8.5	Reviewed team progress on network and auction modeling; attended internal meetings; client emails
Johnson, Jeffrey	18-May-20	9.0	Internal review of key model assumptions; key input modeling
Johnson, Jeffrey	19-May-20	12.0	Iterated on slides for client discussion; internal meetings; output review
Johnson, Jeffrey	20-May-20	11.5	Client meeting; internal discussions on Tech X modeling; internal review of competitor research
Johnson, Jeffrey	22-May-20	7.5	Tech X modeling discussions and output review
Johnson, Jeffrey	26-May-20	10.0	RDOF discussion with legal team; slide work
Johnson, Jeffrey	27-May-20	12.0	Iterated on slides for client discussion; initial auction model discussion
Johnson, Jeffrey	28-May-20	12.0	Model development support, slide work, client emails
Johnson, Jeffrey	29-May-20	8.5	Slide edits for client readout; participated in client readout
Johnson, Jeffrey	1-Jun-20	9.0	Model review; drafted slides for client discussion
Johnson, Jeffrey	2-Jun-20	10.5	Slide work; output review; internal meetings re: RDOF scenarios
Johnson, Jeffrey	3-Jun-20	8.5	Slide edits for client readout; participated in client readout
Johnson, Jeffrey	4-Jun-20	10.0	Client emails; review Tech X assumptions and output; internal meetings
Johnson, Jeffrey	5-Jun-20	7.5	Output review; internal model review
Johnson, Jeffrey	8-Jun-20	10.0	Tech X modeling review; internal model and scenarios review
Johnson, Jeffrey	9-Jun-20	9.0	External model assumptions validation for Tech X; internal discussions on Tech X adjustments
Johnson, Jeffrey	10-Jun-20	10.5	Internal model review; Tech Y modeling process review
Johnson, Jeffrey	11-Jun-20	10.0	Reviewed Tech X output, client emails, participated in internal meetings
Johnson, Jeffrey	15-Jun-20	10.5	Model review; external Tech X assumptions review
Johnson, Jeffrey	16-Jun-20	11.0	Tech Y process and output review, drafted slides for client meeting
Johnson, Jeffrey	17-Jun-20	9.0	Slide edits for client readout; participated in client readout
Johnson, Jeffrey	18-Jun-20	10.0	Tech X assumptions review; participated in client discussion on Tech X assumptions
Johnson, Jeffrey	19-Jun-20	8.5	Reviewed Tech Y output, participated in internal meetings
Johnson, Jeffrey	22-Jun-20	11.0	Drafted slides for client meeting; reviewed model outputs
Johnson, Jeffrey	23-Jun-20	9.0	Iterated on slides for client readout; reviewed model outputs
Johnson, Jeffrey	24-Jun-20	9.5	Iterated on slides for client readout; participated in internal meetings
Johnson, Jeffrey	25-Jun-20	8.0	Slide edits for client readout; participated in client readout

Johnson, Jeffrey 26-Jun-20 4.0 Reviewed remaining tasks with team; client emails
Full Summary 459.0

Professional	Date	Hours	Activities
Goss, Patrick	27-May-20	1.0	Internal team discussion
	Full Summary	1.0	

Professional	Date	Hours	Activities
Goss, Patrick	9-Jun-20	1.5	Kickoff meeting with team to discuss project plan
Goss, Patrick	10-Jun-20	1.0	Follow-up meeting to discuss analysis approach
Goss, Patrick	15-Jun-20	1.0	Meeting to discuss analysis approach and initial results
Goss, Patrick	16-Jun-20	0.5	Follow-up meeting to discuss approach and results
	Full Summary	4.0	

Professional	Date	Hours	Activities
Kazim, Imad	6-Apr-20	1.5	Market analysis and project discussion with working team
Kazim, Imad	13-Apr-20	0.5	Project discussion with working team
	Full Summary	2.0	

Professional	Date	Hours	Activities
Kazim, Imad	15-Apr-20	2.0	Input development analysis
Kazim, Imad	16-Apr-20	1.5	Input development analysis
Kazim, Imad	6-May-20	0.5	Input development analysis
Kazim, Imad	8-May-20	2.5	Input development analysis
Kazim, Imad	11-May-20	5.0	Input development analysis
Kazim, Imad	12-May-20	6.0	Input development analysis
Kazim, Imad	13-May-20	5.0	Input development analysis
Kazim, Imad	14-May-20	4.5	Input development analysis
Kazim, Imad	15-May-20	2.5	Input development analysis
Kazim, Imad	18-May-20	6.0	Input development analysis
Kazim, Imad	19-May-20	10.0	Input development analysis
Kazim, Imad	20-May-20	7.0	Input development analysis
Kazim, Imad	21-May-20	3.0	Input development analysis
Kazim, Imad	22-May-20	5.0	Input development analysis
Kazim, Imad	26-May-20	1.0	Input development analysis
Kazim, Imad	27-May-20	2.0	Input development analysis
Kazim, Imad	28-May-20	1.0	Input development analysis
Kazim, Imad	1-Jun-20	0.5	Input development analysis
Kazim, Imad	2-Jun-20	2.5	Input development analysis
Kazim, Imad	10-Jun-20	1.0	Input development analysis
Kazim, Imad	18-Jun-20	0.5	Input development analysis
Kazim, Imad	22-Jun-20	0.5	Input development analysis
Kazim, Imad	24-Jun-20	0.5	Input development analysis
	Full Summary	70.0	

Professional	Date	Hours	Activities
Yarbrough, Mary	23-Mar-20	1.5	Initial meeting with working team
Yarbrough, Mary	30-Mar-20	1.5	Project status check-in with team
Yarbrough, Mary	6-Apr-20	2.0	Project status check-in and follow up discussion
	Full Summary	5.0	

Professional	Date	Hours	Activities
Yarbrough, Mary	21-Apr-20	1.5	Kickoff Planning, Staffing, Project Context
Yarbrough, Mary	23-Apr-20	0.5	Kickoff Call
Yarbrough, Mary	27-Apr-20	2.5	Status update with team manager and leaders
Yarbrough, Mary	4-May-20	3.5	Discuss model inputs, assumptions, for initial run, delineate/compare solutions
Yarbrough, Mary	11-May-20	3.0	
	Full Summary	11.0	

Professional	Date	Hours	Activities
Archer, Kyle	13-Apr-20	12.0	Ramped on initial project scope--prepared project administrivia, and looked through prior project scripts
Archer, Kyle	14-Apr-20	12.0	Ramped on initial project scope--prepared project administrivia, and looked through prior project scripts
Archer, Kyle	15-Apr-20	14.0	Reading of RDOF auction materials, and preparation of deck outline procedures
Archer, Kyle	16-Apr-20	10.0	Began investigation of ARO inputs, including location layer and competitive profile
Archer, Kyle	17-Apr-20	8.0	Further investigation of ARO inputs, including location layer and competitive profile
Archer, Kyle	21-Apr-20	12.0	Team project kickoff meetings--investigated FCC vs WIN footprint. Assisted CK in beginning competitive analysis
Archer, Kyle	22-Apr-20	11.0	Began financial modeling work using prior work as starting point
Archer, Kyle	23-Apr-20	14.0	Further assisted CK competitive work; started county and wc level cuts of full footprint builds
Archer, Kyle	24-Apr-20	8.0	Finalized county and wc level cuts of full footprint builds
Archer, Kyle	27-Apr-20	12.0	Began adaptation of financial model for CBG level output. Set up pulls for granular financial and location data
Archer, Kyle	28-Apr-20	14.0	Finalized first pass of financial model, and tested with initial ARO output
Archer, Kyle	29-Apr-20	10.0	Loaded and cleaned initial expansion location layer. Supported CK on CAFII pulls and original footprint analysis
Archer, Kyle	30-Apr-20	10.0	Further work on initial location layer. Model integration of build, and Macro cleaning
Archer, Kyle	1-May-20	8.0	Model QC and work on case development
Archer, Kyle	4-May-20	14.0	First pass of IRR and bidding model
Archer, Kyle	5-May-20	16.0	Flowed initial output from sample service area into slide output
Archer, Kyle	6-May-20	12.0	Continued modeling of sample service area, including model refinements and further slides
Archer, Kyle	7-May-20	10.0	Finalized Deck for week 3 check in.
Archer, Kyle	8-May-20	8.0	Full footprint test of model; worked on creation of locations layer
Archer, Kyle	11-May-20	12.0	Adjusted financial model to incorporate technology, as well specific location integration
Archer, Kyle	12-May-20	11.0	Continued update of financial model
Archer, Kyle	13-May-20	10.0	Loaded new location layer from WIN team and ran initial vetting / analysis
Archer, Kyle	14-May-20	11.0	Updated bidding model with clawback logic
Archer, Kyle	15-May-20	8.0	Supported AI team on location scaling work
Archer, Kyle	18-May-20	14.0	SMB ARPU refinement; refined location scaling work, and passed a location layer into ARO
Archer, Kyle	19-May-20	14.0	Reviewed FCC RDOF rules update. Refined penetration inputs.
Archer, Kyle	20-May-20	16.0	Pushed initial footprint run through ARO--worked with ARO team to debug
Archer, Kyle	21-May-20	16.0	Adjusted model to prepare for full footprint run, including refinement of cost inputs
Archer, Kyle	22-May-20	9.0	Ran initial full footprint run and prepared combined footprint output
Archer, Kyle	26-May-20	15.0	Expanded financial model capabilities
Archer, Kyle	27-May-20	15.0	Ran full footprint through financial model
Archer, Kyle	28-May-20	14.0	Created output for initial runs, and slidework / detail for location layer adjustments
Archer, Kyle	29-May-20	8.0	Ran test case of newest model updates, and prepared for meeting with WIN team
Archer, Kyle	1-Jun-20	11.0	Ran the updated financial and bid models based on updates from WIN, as well as new penetration curves
Archer, Kyle	2-Jun-20	12.0	Refined presentation for discussion with WIN team, including sample service area model--expanded detail for location layer
Archer, Kyle	3-Jun-20	10.0	Scraped and analyzed competitor E impact on the model clearing round and competitors
Archer, Kyle	4-Jun-20	8.0	Tested impact of cases on output
Archer, Kyle	5-Jun-20	11.0	Assisted in analysis for clearing round model. Refined ARPU CAGRs. Ran most recent cases through engine
Archer, Kyle	8-Jun-20	13.0	Began analysis of subset of competitors. Ran financial model for new case, and built additional functionality for financial model
Archer, Kyle	9-Jun-20	13.0	Wrote python script to analyze footprint inputs. Assisted JL in debugging minor ARO issues. Supported CK on clearing round
Archer, Kyle	10-Jun-20	12.0	Ran newest financial model scenarios. Pulled bidding metrics to understand and use implications
Archer, Kyle	12-Jun-20	8.0	Supported case study work, and pull metrics for threshold work
Archer, Kyle	15-Jun-20	13.0	Deep dived into drivers of bidding. Refined financial model to take updated cost inputs
Archer, Kyle	16-Jun-20	12.0	Updated logic and model around competitor possible bidding. Looked into overall US competitor presence
Archer, Kyle	17-Jun-20	13.0	Prepared slides for conversation with WIN team--pulled metrics from financial model for case studies
Archer, Kyle	18-Jun-20	10.0	Adjusted fiber routes for ARO layers to better represent previous work; created location layer for case
Archer, Kyle	19-Jun-20	8.0	Adjusted pruning for case
Archer, Kyle	22-Jun-20	14.0	Further edits to financial model. Wrote code to pull penetration stats. Updated edge case pen numbers.
Archer, Kyle	23-Jun-20	12.0	Updated case to use most recent machine learning output, and flowed through to model output.
Archer, Kyle	24-Jun-20	14.0	Adjusted approach for Tech to be GIS based, and worked towards initial output. Ran scenarios for new case. Created slides outlining case output

Main Document

Archer, Kyle 25-Jun-20 9.0 Prepared presentation for WIN team, including supporting case study creation
Archer, Kyle 26-Jun-20 5.0 Assessed impact of FCC update to RDOF locations, and created explanatory materials
606.0

Professional	Date	Hours	Activities
Del Percio, Matthew	13-Apr-20	2.0	Reviewed FCC RDOF order and technical guide
Del Percio, Matthew	14-Apr-20	1.0	Internal kickoff meeting
Del Percio, Matthew	15-Apr-20	1.0	Team meeting to discuss project approach, workstreams, activities
Del Percio, Matthew	16-Apr-20	1.5	Project kickoff meeting with client; internal discussion on terminal penetration
Del Percio, Matthew	17-Apr-20	1.0	Team meeting to discuss project approach, workstreams, activities
Del Percio, Matthew	20-Apr-20	1.0	Team meeting to discuss status; setup rapid surveys for BB in rural areas
Del Percio, Matthew	21-Apr-20	0.5	Team meeting to discuss status
Del Percio, Matthew	22-Apr-20	1.0	Team meeting to discuss status
Del Percio, Matthew	23-Apr-20	1.5	Team meeting to discuss status
Del Percio, Matthew	24-Apr-20	1.5	Team meeting to discuss status
Del Percio, Matthew	27-Apr-20	0.5	Team meeting to discuss status
Del Percio, Matthew	28-Apr-20	2.0	Call with client to discuss geographic boundaries and location data; team meeting to discuss status; RDOF webinar
Del Percio, Matthew	29-Apr-20	1.0	Deck review for client meeting on 5/7; team meeting to discuss status
Del Percio, Matthew	30-Apr-20	1.0	Call with client to discuss project status and initial findings
Del Percio, Matthew	1-May-20	1.5	Team meeting to discuss status; RDOF rules review
Del Percio, Matthew	4-May-20	1.5	Team meeting to discuss status; team meeting to review BAU financial model and terminal penetration
Del Percio, Matthew	5-May-20	0.5	Team meeting to discuss status
Del Percio, Matthew	6-May-20	0.5	Team meeting to discuss status
Del Percio, Matthew	7-May-20	0.5	Team meeting to discuss status
Del Percio, Matthew	8-May-20	0.5	Team meeting to discuss status
Del Percio, Matthew	11-May-20	1.0	Team meeting to discuss status
Del Percio, Matthew	12-May-20	1.0	Team meeting to discuss status
Del Percio, Matthew	13-May-20	1.0	Team meeting to discuss status
Del Percio, Matthew	14-May-20	0.5	Team meeting to discuss status
Del Percio, Matthew	15-May-20	0.5	Team meeting to discuss status
Del Percio, Matthew	18-May-20	1.0	Team meeting to discuss status
Del Percio, Matthew	19-May-20	0.5	Team meeting to discuss status
Del Percio, Matthew	20-May-20	0.5	Team meeting to discuss status
Del Percio, Matthew	21-May-20	0.5	Team meeting to discuss status
Del Percio, Matthew	22-May-20	0.5	Team meeting to discuss status
Del Percio, Matthew	25-May-20	1.0	Team meeting to discuss status
Del Percio, Matthew	26-May-20	1.0	Team meeting to discuss status
Del Percio, Matthew	27-May-20	1.0	Team meeting to discuss status
Del Percio, Matthew	28-May-20	1.0	Team meeting to discuss status
Del Percio, Matthew	29-May-20	0.5	Team meeting to discuss status
Del Percio, Matthew	1-Jun-20	1.0	Team meeting to discuss status
Del Percio, Matthew	2-Jun-20	0.5	Team meeting to discuss status
Del Percio, Matthew	3-Jun-20	0.5	Team meeting to discuss status
Del Percio, Matthew	4-Jun-20	1.0	Team meeting to discuss status
Del Percio, Matthew	5-Jun-20	1.0	Team meeting to discuss status
Del Percio, Matthew	8-Jun-20	1.0	Team meeting to discuss status
Del Percio, Matthew	9-Jun-20	0.5	Team meeting to discuss status
Del Percio, Matthew	10-Jun-20	1.0	Team meeting to discuss status
Del Percio, Matthew	11-Jun-20	1.0	Team meeting to discuss status
Del Percio, Matthew	12-Jun-20	0.5	Team meeting to discuss status
Del Percio, Matthew	15-Jun-20	1.0	Team meeting to discuss status
Del Percio, Matthew	16-Jun-20	1.0	Team meeting to discuss status

Del Percio, Matthew	17-Jun-20	1.0	Team meeting to discuss status
Del Percio, Matthew	18-Jun-20	0.5	Team meeting to discuss status
Del Percio, Matthew	19-Jun-20	0.5	Team meeting to discuss status
Del Percio, Matthew	22-Jun-20	1.0	Team meeting to discuss status
Del Percio, Matthew	23-Jun-20	1.0	Team meeting to discuss status
Del Percio, Matthew	24-Jun-20	0.5	Team meeting to discuss status
Del Percio, Matthew	25-Jun-20	1.0	Team meeting to discuss status
Del Percio, Matthew	26-Jun-20	0.5	Team meeting to discuss status
	Full Summary	49.0	

Professional	Date	Hours	Activities
Del Percio, Matthew	8-Jun-20	1.0	Internal project kickoff meeting
Del Percio, Matthew	9-Jun-20	1.0	Review workplan and schedule with team
Del Percio, Matthew	10-Jun-20	1.0	Met with team to review progress, discuss next step
Del Percio, Matthew	11-Jun-20	1.0	Met with team to review progress, discuss next step
Del Percio, Matthew	12-Jun-20	1.0	Met with team to review progress, discuss next step
Del Percio, Matthew	15-Jun-20	1.0	Met with team to review progress, discuss next step
Del Percio, Matthew	16-Jun-20	1.0	Met with team to review progress, discuss next step
Del Percio, Matthew	17-Jun-20	1.0	Met with team to review progress, discuss next step
Del Percio, Matthew	18-Jun-20	1.0	Met with WIN stakeholders to review output
Del Percio, Matthew	19-Jun-20	1.0	Met with team to review progress, discuss next step
	Full Summary	10.0	

Professional	Date	Hours	Activities
Kilgariff, Christina	20-Apr-20	9.0	Reviewed scope document, researched relevant FCC documents and guidelines, reviewed internal research for prior client work
Kilgariff, Christina	21-Apr-20	10.8	Attended internal ARO methodology discussion & internal project kick-off; began competitive analysis
Kilgariff, Christina	22-Apr-20	11.5	Analyzed client-provided data, reviewed client documents; continued competitive analysis in Tableau, excel, open source
Kilgariff, Christina	23-Apr-20	10.5	Attended project team kick-off with client; reviewed kick-off materials and researched CAFII Auction
Kilgariff, Christina	24-Apr-20	7.0	Attended internal team strategy meetings, client data analysis
Kilgariff, Christina	27-Apr-20	11.3	Attended tutorial on AVCo network route optimization tool; finalized competitive landscape outputs for project team
Kilgariff, Christina	28-Apr-20	11.0	Analyzed technology coverage in the US using FCC datasets (Form 477, etc.)
Kilgariff, Christina	29-Apr-20	10.5	Researched broadband adoption in rural areas; analyzed CAF II A auction rules, results, and TL weight impact
Kilgariff, Christina	30-Apr-20	10.0	Researched broadband adoption in rural areas; analyzed CAF II A auction rules, results, and TL weight impact
Kilgariff, Christina	1-May-20	6.5	Researched broadband adoption in rural areas; analyzed CAF II A auction rules, results, and TL weight impact
Kilgariff, Christina	4-May-20	9.5	Researched broadband adoption in rural areas; analyzed CAF II A auction rules, results, and TL weight impact
Kilgariff, Christina	5-May-20	10.8	Ran alternate scenario analysis on CAF II A auction using RDOF rules; analyzed where bidders bid competitive speeds
Kilgariff, Christina	6-May-20	9.8	Participated in client meeting to discuss exchange mapping; attended tutorial for GIS mapping tool
Kilgariff, Christina	7-May-20	10.0	Client discussions
Kilgariff, Christina	8-May-20	8.3	Internal auction/competitive model development
Kilgariff, Christina	11-May-20	12.5	Internal model methodology development; established framework for auction competitive analysis
Kilgariff, Christina	12-May-20	12.5	Internal model methodology development; discussed client assumptions for network deployment
Kilgariff, Christina	13-May-20	8.0	Internal model methodology development; developed simplified scenarios for where the auction might clear
Kilgariff, Christina	14-May-20	9.0	Client meeting to discuss preliminary model outputs; prepared materials in excel for client reference
Kilgariff, Christina	15-May-20	8.3	Led internal workshop on internal model structure and assumptions
Kilgariff, Christina	18-May-20	12.0	Refined model assumptions, structure; analyzed correlation between bidding and area demographics, characteristics, etc.
Kilgariff, Christina	19-May-20	11.8	Refined model assumptions, structure; analyzed correlation between bidding and area demographics, characteristics, etc.
Kilgariff, Christina	20-May-20	10.8	Led internal workshop on internal model structure and assumptions
Kilgariff, Christina	21-May-20	10.0	Open source research on satellite providers and RDOF performance requirements
Kilgariff, Christina	26-May-20	12.3	Attended interview with subject matter expert on RDOF auction regulation; prepared materials for core team meeting on internal model
Kilgariff, Christina	27-May-20	11.0	Prepared slides for 05/29 interim readout; ran core team meeting on internal model
Kilgariff, Christina	28-May-20	12.3	Prepared slides for 05/29 interim readout; ran internal team meeting on internal model
Kilgariff, Christina	29-May-20	7.5	Prepared slides and attended interim readout with client; attended internal planning meeting
Kilgariff, Christina	1-Jun-20	10.3	Refined presentation for discussion with WIN team, including layout of auction rules, competitive dynamics, analysis of where the auction may clear
Kilgariff, Christina	2-Jun-20	11.8	Refined presentation for discussion with WIN team, including layout of auction rules, competitive dynamics, analysis of where the auction may clear
Kilgariff, Christina	3-Jun-20	9.8	Finalized slides for discussion with WIN team
Kilgariff, Christina	4-Jun-20	12.5	Analyzed potential competitor impact on auction clearing round
Kilgariff, Christina	5-Jun-20	8.0	Refinement of competitive analysis framework, impact on auction model
Kilgariff, Christina	8-Jun-20	14.0	Analysis of specific subset of competitors; auction model mechanics refinement and adjustment to model inputs
Kilgariff, Christina	9-Jun-20	11.8	Analysis of specific subset of competitors; auction model mechanics refinement and adjustment to model inputs
Kilgariff, Christina	10-Jun-20	13.8	Analysis of specific subset of competitors; auction model mechanics refinement and adjustment to model inputs
Kilgariff, Christina	11-Jun-20	12.5	Analysis of specific subset of competitors; auction model mechanics refinement and adjustment to model inputs
Kilgariff, Christina	12-Jun-20	7.5	Ran multiple bidding inputs through competition scenarios for WIN team; analyzed impact of adjustments to financial inputs
Kilgariff, Christina	15-Jun-20	13.0	Slide development and meeting prep for 06/17 client meeting
Kilgariff, Christina	16-Jun-20	12.0	Slide development and meeting prep for 06/17 client meeting; analyzed correlation between bidding and area demographics, characteristics, etc.
Kilgariff, Christina	17-Jun-20	9.0	Discussed internal model case outputs and refined inputs
Kilgariff, Christina	18-Jun-20	11.5	Conducted internal workshop to refine model case outputs
Kilgariff, Christina	19-Jun-20	7.5	Internal model refinement; began thinking about high-level bidding strategy and model mechanics to support changes in decision-making
Kilgariff, Christina	22-Jun-20	12.0	Prepared materials in powerpoint to support 06/25 pre-final readout
Kilgariff, Christina	23-Jun-20	11.3	Prepared materials in powerpoint to support 06/25 pre-final readout
Kilgariff, Christina	24-Jun-20	13.0	Prepared materials in powerpoint to support 06/25 pre-final readout
Kilgariff, Christina	25-Jun-20	9.0	Prepared materials in powerpoint and attended pre-final readout with client team
Kilgariff, Christina	26-Jun-20	5.0	Assessed impact of FCC update to RDOF locations and potential clearing round
	Full Summary	499.0	

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Professional	Date	Hours	Activities
Lee, Tom	5-May-20	0.3	Setup and analyzed data for RDOF investigation
Lee, Tom	10-Jun-20	1.5	Integrated zone data into analysis pipeline
Lee, Tom	11-Jun-20	4.0	Analyzed expansion zone and RDOF data
Lee, Tom	12-Jun-20	2.0	Provided data products for new analysis
	Full Summary	7.8	

Professional	Date	Hours	Activities
Link, Jeremiah	20-Apr-20	8.5	ARO Kickoff; initial ARO output testing
Link, Jeremiah	21-Apr-20	10.0	Project kickoff; reviewed initial scenarios; input revisions for further testing
Link, Jeremiah	22-Apr-20	10.5	Test optimizations with revised inputs; preparation for client kickoff
Link, Jeremiah	23-Apr-20	10.5	Client kickoff; technology inputs documentation; optimization testing
Link, Jeremiah	24-Apr-20	9.0	Optimization testing; reporting development
Link, Jeremiah	27-Apr-20	10.5	Full footprint optimization testing; reporting development
Link, Jeremiah	28-Apr-20	10.0	Reporting testing by technology; redefining output requirements
Link, Jeremiah	29-Apr-20	9.5	Optimization testing by technology; reporting file adjustments
Link, Jeremiah	30-Apr-20	11.0	Optimization runs and CBG level reporting tests
Link, Jeremiah	1-May-20	9.0	Optimization runs and CBG level reporting tests
Link, Jeremiah	4-May-20	12.5	Preparation for client meeting; case study generation; full footprint optimization
Link, Jeremiah	5-May-20	13.0	Client check in; report processing for full footprint optimization
Link, Jeremiah	6-May-20	10.0	case study generation; slide preparation
Link, Jeremiah	7-May-20	13.0	Final preparation for client checkin; refine optimization logic and retest
Link, Jeremiah	8-May-20	9.0	Compile status of optimization and testing progress
Link, Jeremiah	11-May-20	11.0	Optimization testing for input parameters; prep for meeting with client team
Link, Jeremiah	12-May-20	10.0	Client meeting and debrief, technology inputs discussion and refinement
Link, Jeremiah	13-May-20	11.0	Scenario testing on technology inputs; report processing and output generation
Link, Jeremiah	14-May-20	11.0	Technology input modeling discussion with client team; revisions to optimization inputs
Link, Jeremiah	15-May-20	9.0	Incorporate location data into ARO; scenario runs
Link, Jeremiah	18-May-20	11.0	Optimization and reporting adjustments
Link, Jeremiah	19-May-20	11.0	Technology input sensitivity testing for full footprint
Link, Jeremiah	20-May-20	12.0	Reporting adjustments and optimization testing
Link, Jeremiah	21-May-20	12.5	Full footprint reporting output and optimization testing
Link, Jeremiah	22-May-20	9.0	Full footprint optimization sensitivity testing
Link, Jeremiah	26-May-20	12.0	Scenario optimizations by technology and reporting preparation
Link, Jeremiah	27-May-20	11.5	Scenario optimizations by technology and output generation
Link, Jeremiah	28-May-20	13.0	Scenario optimizations; technology input sensitivity analysis; client check in preparation
Link, Jeremiah	29-May-20	9.0	Client check in preparation and review; follow up optimization adjustments
Link, Jeremiah	1-Jun-20	10.0	Follow up optimization adjustments and re-run
Link, Jeremiah	2-Jun-20	11.0	Scenario optimizations; client check in preparation
Link, Jeremiah	3-Jun-20	13.0	Full footprint optimization; reporting granularity testing; output QGIS mapping
Link, Jeremiah	4-Jun-20	13.0	Reporting adjustments and file buildout; input testing
Link, Jeremiah	5-Jun-20	9.0	Optimization testing; input sensitivity testing
Link, Jeremiah	8-Jun-20	9.5	Optimization testing and reporting adjustments
Link, Jeremiah	9-Jun-20	10.0	Technology inputs discussion; adjusted coverage optimization; testing coverage level pruning
Link, Jeremiah	10-Jun-20	11.0	Full footprint optimization with adjustments; technology sensitivity analysis
Link, Jeremiah	11-Jun-20	11.0	Optimization logic testing
Link, Jeremiah	12-Jun-20	9.0	Optimization output testing
Link, Jeremiah	15-Jun-20	11.0	Incremental opportunity input development
Link, Jeremiah	16-Jun-20	13.0	Technology mapping; case study creation and analysis; slide preparation

Link, Jeremiah	17-Jun-20	10.0	slide preparation and adjustments to case studies
Link, Jeremiah	18-Jun-20	13.0	Incremental opportunity initial testing
Link, Jeremiah	19-Jun-20	9.0	Incremental opportunity case studies and testing; adjustment to incremental opportunity inputs
Link, Jeremiah	22-Jun-20	12.5	Incremental opportunity larger test runs
Link, Jeremiah	23-Jun-20	13.5	Full footprint incremental opportunity optimization
Link, Jeremiah	24-Jun-20	12.5	Full footprint incremental opportunity reporting and analysis; slide creation
Link, Jeremiah	25-Jun-20	9.0	Client meeting preparation
Link, Jeremiah	26-Jun-20	5.0	Client meeting follow up analysis and output testing
	Full Summary	524.0	

Professional	Date	Hours	Activities
Musial, Adam	13-Apr-20	4.0	Road edge tagging
Musial, Adam	14-Apr-20	3.0	Testing of road edge tagging
Musial, Adam	15-Apr-20	2.0	Performance benchmarking
Musial, Adam	16-Apr-20	1.0	Performance benchmarking, ctd.
Musial, Adam	17-Apr-20	2.0	Reoptimize tagged road edges
Musial, Adam	20-Apr-20	7.0	Coding of CBG-level plan report
Musial, Adam	21-Apr-20	5.0	Finalize first draft of CBG-level plan report
Musial, Adam	22-Apr-20	3.0	Troubleshooting and small updates to CBG-level report
Musial, Adam	23-Apr-20	8.0	Refining CBG-level report
Musial, Adam	24-Apr-20	4.0	More work on CBG-level report
Musial, Adam	27-Apr-20	3.0	Writing new reports, for FW
Musial, Adam	28-Apr-20	7.0	Further tweaks to CMG-level report
Musial, Adam	29-Apr-20	4.0	Report Optimizations
Musial, Adam	30-Apr-20	7.0	Troubleshooting and report optimization
Musial, Adam	1-May-20	3.0	Tool Troubleshooting
Musial, Adam	4-May-20	6.0	Fixed plan testing
Musial, Adam	5-May-20	4.0	Troubleshooting
Musial, Adam	7-May-20	3.0	Routing from fiber questions
Musial, Adam	11-May-20	2.0	New FW Report writing
Musial, Adam	12-May-20	1.0	Updates to Locations report
Musial, Adam	13-May-20	4.0	Uploading new data, and brainstorming new technology analysis
Musial, Adam	14-May-20	5.0	Troubleshooting; troubleshooting app's performance
Musial, Adam	15-May-20	2.0	uploading new location layers, and troubleshooting
Musial, Adam	19-May-20	3.0	Troubleshooting / writing new reports
Musial, Adam	20-May-20	4.0	Reports, locations uploads, consults, and data debugging
Musial, Adam	21-May-20	1.0	Troubleshooting
Musial, Adam	22-May-20	1.0	Debugging
Musial, Adam	26-May-20	1.0	Downloading Reports
Musial, Adam	27-May-20	1.0	Downloading Reports, and troubleshooting
Musial, Adam	28-May-20	1.0	Downloading Reports, and troubleshooting
Musial, Adam	29-May-20	1.0	Troubleshooting
Musial, Adam	1-Jun-20	2.0	Downloading Reports, and performance improvements
Musial, Adam	2-Jun-20	3.0	Report Optimizations and updates
Musial, Adam	3-Jun-20	4.0	Reports downloads and troubleshooting reports
Musial, Adam	4-Jun-20	5.0	Uploading new service areas, and answering questions / debugging; updating reports
Musial, Adam	5-Jun-20	1.0	Debugging service area
Musial, Adam	8-Jun-20	3.0	Debugging with the team
Musial, Adam	9-Jun-20	2.0	Debugging
Musial, Adam	10-Jun-20	1.0	Debugging

Musial, Adam	12-Jun-20	2.0 Debugging
Musial, Adam	15-Jun-20	1.0 Uploading fiber data
Musial, Adam	16-Jun-20	1.0 Downloading data layers from the tool
Musial, Adam	18-Jun-20	2.0 Uploading new location and fiber layers
Musial, Adam	19-Jun-20	2.0 Uploading fiber layers and troubleshooting
Musial, Adam	22-Jun-20	3.0 Debugging fiber layers; debugging, loading new location layers
Musial, Adam	23-Jun-20	2.0 Data layer re-uploads and debugging
Musial, Adam	24-Jun-20	2.0 Extracting old plans data
	Full Summary	139.0

Professional	Date	Hours	Activities
Cubillo, Adalberto	9-Jun-20	10.5	Initial data retrieval and modeling tasks
Cubillo, Adalberto	10-Jun-20	8.5	Initial data retrieval and modeling tasks
Cubillo, Adalberto	11-Jun-20	10	Initial data retrieval and modeling tasks
Cubillo, Adalberto	12-Jun-20	8.5	Initial data retrieval and modeling tasks
Cubillo, Adalberto	15-Jun-20	9.5	Modeling and predicting road segments tasks
Cubillo, Adalberto	16-Jun-20	7.5	Modeling and predicting road segments tasks
Cubillo, Adalberto	17-Jun-20	9.5	Modeling and predicting road segments tasks
Cubillo, Adalberto	18-Jun-20	7.5	Modeling and predicting road segments tasks
Cubillo, Adalberto	19-Jun-20	8.5	Modeling and predicting road segments tasks
Cubillo, Adalberto	22-Jun-20	7.5	Troubleshooting of initial output
Cubillo, Adalberto	23-Jun-20	10	Troubleshooting of initial output
Cubillo, Adalberto	24-Jun-20	9.5	Troubleshooting of initial output
Cubillo, Adalberto	25-Jun-20	7.5	Troubleshooting of initial output
Cubillo, Adalberto	26-Jun-20	7	Troubleshooting of initial output
	Full Summary	121.5	

Professional	Date	Hours	Activities
Paasche, David	8-Jun-20	11.0	Reviewed scope document; began training neural net; conducted secondary research
Paasche, David	9-Jun-20	13.5	Continued training neural net; conducted secondary research
Paasche, David	10-Jun-20	6.0	Continued training neural net; reviewed initial neural net output and began troubleshooting to improve model accuracy
Paasche, David	11-Jun-20	7.0	Drafted slide output; continued training neural net
Paasche, David	12-Jun-20	8.0	Prepared summary materials with initial model output; analyzed model output for ways to improve accuracy
Paasche, David	15-Jun-20	12.0	Shared initial output with team; analyzed output by morphology and population density to refine assumptions; worked to improve prediction accuracy
Paasche, David	16-Jun-20	9.0	Iterated on model output to improve prediction accuracy; drafted slides to summarize result
Paasche, David	17-Jun-20	8.0	Iterated on model output; iterated on slide output
Paasche, David	18-Jun-20	6.0	Continued training neural net; iterated on slide output
Paasche, David	19-Jun-20	0.5	Briefly reviewed latest model output; most of day spent on other project
Paasche, David	22-Jun-20	10.5	Iterated on model output for model run over additional areas; shared and reviewed output with team; ran analyses to validate model output
Paasche, David	23-Jun-20	10.5	Iterated on model and slide output; started new analysis to refine model assumption
Paasche, David	24-Jun-20	9.5	Iterated on model and slide output; completed analysis to refine assumption
Paasche, David	25-Jun-20	8.0	Iterated on model and slide output; fed results into financial model
Paasche, David	26-Jun-20	8.0	Iterated on model output; continued training neural net
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