

Form 5500 Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Annual Return/Report of Employee Benefit Plan This form is required to be filed for employee benefit plans under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA) and sections 6057(b) and 6058(a) of the Internal Revenue Code (the Code). ► Complete all entries in accordance with the instructions to the Form 5500.	OMB Nos. 1210-0110 1210-0089 2016 This Form is Open to Public Inspection
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Part I	Annual Report Identification Information		
For calendar plan year 2016 or fiscal plan year beginning <u>01/01/2016</u> and ending <u>12/31/2016</u>			
A	This return/report is for:	☐ a multiemployer plan ☒ a multiple-employer plan (Filers checking this box must attach a list of participating employer information in accordance with the form instructions.)	
	☐ a single-employer plan ☐ the first return/report ☐ an amended return/report	☐ a DFE (specify) _____ ☐ the final return/report ☐ a short plan year return/report (less than 12 months)	
C	If the plan is a collectively-bargained plan, check here. ☒		
D	Check box if filing under:	☒ Form 5558 ☐ special extension (enter description)	☐ automatic extension ☐ the DFVC program

Part II	Basic Plan Information —enter all requested information		
1a	Name of plan <u>RETIREMENT&SECURITY PROGRAM FOR EMPLOYEES OF NTCA AND ITS MEMBERS</u>	1b	Three-digit plan number (PN) ► <u>333</u>
		1c	Effective date of plan <u>01/01/1959</u>
2a	Plan sponsor's name (employer, if for a single-employer plan) Mailing address (include room, apt., suite no. and street, or P.O. Box) City or town, state or province, country, and ZIP or foreign postal code (if foreign, see instructions) <u>NATIONAL TELECOMMUNICATIONS COOPERATIVE ASSOCIATION</u> <u>4121 WILSON BLVD 10TH FL</u> <u>ARLINGTON, VA 22203-1839</u>	2b	Employer Identification Number (EIN) <u>52-0741336</u>
		2c	Plan Sponsor's telephone number <u>703-351-2000</u>
		2d	Business code (see instructions) <u>517000</u>

Caution: A penalty for the late or incomplete filing of this return/report will be assessed unless reasonable cause is established.

Under penalties of perjury and other penalties set forth in the instructions, I declare that I have examined this return/report, including accompanying schedules, statements and attachments, as well as the electronic version of this return/report, and to the best of my knowledge and belief, it is true, correct, and complete.

SIGN HERE	Filed with authorized/valid electronic signature.	10/16/2017	SCOTT GARDNER
	Signature of plan administrator	Date	Enter name of individual signing as plan administrator
SIGN HERE			
	Signature of employer/plan sponsor	Date	Enter name of individual signing as employer or plan sponsor
SIGN HERE			
	Signature of DFE	Date	Enter name of individual signing as DFE
Preparer's name (including firm name, if applicable) and address (include room or suite number)			Preparer's telephone number

3a Plan administrator's name and address ☐ Same as Plan Sponsor NTCA RETIREMENT AND SECURITY/SAVINGS PLAN TRUST COMMITTEE 4121 WILSON BLVD 10TH FL ARLINGTON, VA 22203-1839	3b Administrator's EIN 52-1558805 3c Administrator's telephone number 703-351-2000
4 If the name and/or EIN of the plan sponsor has changed since the last return/report filed for this plan, enter the name, EIN and the plan number from the last return/report: a Sponsor's name	4b EIN 4c PN
5 Total number of participants at the beginning of the plan year	5 17036
6 Number of participants as of the end of the plan year unless otherwise stated (welfare plans complete only lines 6a(1) , 6a(2) , 6b , 6c , and 6d). a(1) Total number of active participants at the beginning of the plan year..... a(2) Total number of active participants at the end of the plan year b Retired or separated participants receiving benefits..... c Other retired or separated participants entitled to future benefits d Subtotal. Add lines 6a(2) , 6b , and 6c e Deceased participants whose beneficiaries are receiving or are entitled to receive benefits. f Total. Add lines 6d and 6e g Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item) h Number of participants that terminated employment during the plan year with accrued benefits that were less than 100% vested	6a(1) 11968 6a(2) 11684 6b 1807 6c 2859 6d 16350 6e 318 6f 16668 6g 6h
7 Enter the total number of employers obligated to contribute to the plan (only multiemployer plans complete this item).....	7
8a If the plan provides pension benefits, enter the applicable pension feature codes from the List of Plan Characteristics Codes in the instructions: 1A 1E 3H 3B b If the plan provides welfare benefits, enter the applicable welfare feature codes from the List of Plan Characteristics Codes in the instructions:	

9a Plan funding arrangement (check all that apply) (1) ☐ Insurance (2) ☐ Code section 412(e)(3) insurance contracts (3) ☒ Trust (4) ☐ General assets of the sponsor	9b Plan benefit arrangement (check all that apply) (1) ☐ Insurance (2) ☐ Code section 412(e)(3) insurance contracts (3) ☒ Trust (4) ☐ General assets of the sponsor
10 Check all applicable boxes in 10a and 10b to indicate which schedules are attached, and, where indicated, enter the number attached. (See instructions)	
a Pension Schedules (1) ☒ R (Retirement Plan Information) (2) ☐ MB (Multiemployer Defined Benefit Plan and Certain Money Purchase Plan Actuarial Information) - signed by the plan actuary (3) ☒ SB (Single-Employer Defined Benefit Plan Actuarial Information) - signed by the plan actuary	b General Schedules (1) ☒ H (Financial Information) (2) ☐ I (Financial Information – Small Plan) (3) ☐ A (Insurance Information) (4) ☒ C (Service Provider Information) (5) ☒ D (DFE/Participating Plan Information) (6) ☐ G (Financial Transaction Schedules)

Part III Form M-1 Compliance Information (to be completed by welfare benefit plans)

11a If the plan provides welfare benefits, was the plan subject to the Form M-1 filing requirements during the plan year? (See instructions and 29 CFR 2520.101-2.) ☐ Yes ☐ No

If "Yes" is checked, complete lines 11b and 11c.

11b Is the plan currently in compliance with the Form M-1 filing requirements? (See instructions and 29 CFR 2520.101-2.) ☐ Yes ☐ No

11c Enter the Receipt Confirmation Code for the 2016 Form M-1 annual report. If the plan was not required to file the 2016 Form M-1 annual report, enter the Receipt Confirmation Code for the most recent Form M-1 that was required to be filed under the Form M-1 filing requirements. (Failure to enter a valid Receipt Confirmation Code will subject the Form 5500 filing to rejection as incomplete.)

Receipt Confirmation Code _____

<div>SCHEDULE SB (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation</div>	<div>Single-Employer Defined Benefit Plan Actuarial Information</div> <div>This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code).</div> <div>File as an attachment to Form 5500 or 5500-SF.</div>	<div>OMB No. 1210-0110</div> <div>2016</div> <div>This Form is Open to Public Inspection</div>
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For calendar plan year 2016 or fiscal plan year beginning 01/01/2016 and ending 12/31/2016	
Round off amounts to nearest dollar.	
Caution: A penalty of \$1,000 will be assessed for late filing of this report unless reasonable cause is established.	
A Name of plan RETIREMENT&SECURITY PROGRAM FOR EMPLOYEES OF NTCA AND ITS MEMBERS	B Three-digit plan number (PN) 333
C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF NATIONAL TELECOMMUNICATIONS COOPERATIVE ASSOCIATION	D Employer Identification Number (EIN) 52-0741336
E Type of plan: Single Multiple-A Multiple-B	F Prior year plan size: 100 or fewer 101-500 More than 500

Part I Basic Information			
1 Enter the valuation date: Month 01 Day 01 Year 2016			
2 Assets:			
a Market value	2a	1796722510	
b Actuarial value	2b	1848666514	
3 Funding target/participant count breakdown	(1) Number of participants	(2) Vested Funding Target	(3) Total Funding Target
a For retired participants and beneficiaries receiving payment	2173	552308905	552308905
b For terminated vested participants	2344	51165804	51165804
c For active participants	12516	1049267480	1250612264
d Total	17033	1652742189	1854086973
4 If the plan is in at-risk status, check the box and complete lines (a) and (b)			
a Funding target disregarding prescribed at-risk assumptions	4a		
b Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor	4b		
5 Effective interest rate	5	6.25 %	
6 Target normal cost	6	94341734	

Statement by Enrolled Actuary

To the best of my knowledge, the information supplied in this schedule and accompanying schedules, statements and attachments, if any, is complete and accurate. Each prescribed assumption was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

<div>SIGN HERE</div>	<div>Signature of actuary</div> <div>MARY E GIBBON</div> <div>Type or print name of actuary</div> <div>TOWERS WATSON DELAWARE INC.</div> <div>Firm name</div> <div>800 N. GLEBE ROAD ARLINGTON, VA 22203</div> <div>Address of the firm</div>	<div>Date</div> <div>17-06921</div> <div>Most recent enrollment number</div> <div>703-258-8000</div> <div>Telephone number (including area code)</div>
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Part II	Beginning of Year Carryover and Prefunding Balances	
	(a) Carryover balance	(b) Prefunding balance
7 Balance at beginning of prior year after applicable adjustments (line 13 from prior year)		
8 Portion elected for use to offset prior year's funding requirement (line 35 from prior year)		
9 Amount remaining (line 7 minus line 8)		
10 Interest on line 9 using prior year's actual return of _____ %.....		
11 Prior year's excess contributions to be added to prefunding balance:		
a Present value of excess contributions (line 38a from prior year)		
b(1) Interest on the excess, if any, of line 38a over line 38b from prior year Schedule SB, using prior year's effective interest rate of <u>6.43</u> %		
b(2) Interest on line 38b from prior year Schedule SB, using prior year's actual return		
c Total available at beginning of current plan year to add to prefunding balance		
d Portion of (c) to be added to prefunding balance		
12 Other reductions in balances due to elections or deemed elections		
13 Balance at beginning of current year (line 9 + line 10 + line 11d – line 12)		

Part III	Funding Percentages	
14 Funding target attainment percentage.....	14	99.70%
15 Adjusted funding target attainment percentage	15	%
16 Prior year's funding percentage for purposes of determining whether carryover/prefunding balances may be used to reduce current year's funding requirement.....	16	%
17 If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage.....	17	%

Part IV	Contributions and Liquidity Shortfalls				
18 Contributions made to the plan for the plan year by employer(s) and employees:					
(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees	(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees
	205045215	12088392			
Totals ►			18(b)	205045215	18(c)
					12088392

19 Discounted employer contributions – see instructions for small plan with a valuation date after the beginning of the year:	
a Contributions allocated toward unpaid minimum required contributions from prior years.	19a
b Contributions made to avoid restrictions adjusted to valuation date	19b
c Contributions allocated toward minimum required contribution for current year adjusted to valuation date	19c
20 Quarterly contributions and liquidity shortfalls:	
a Did the plan have a "funding shortfall" for the prior year?	Yes ☐ No ☐
b If line 20a is "Yes," were required quarterly installments for the current year made in a timely manner?.....	Yes ☐ No ☐
c If line 20a is "Yes," see instructions and complete the following table as applicable:	
Liquidity shortfall as of end of quarter of this plan year	
(1) 1st	(2) 2nd
(3) 3rd	(4) 4th

Part V	Assumptions Used to Determine Funding Target and Target Normal Cost					
21	Discount rate:					
a	Segment rates:	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">1st segment: 4.43%</td> <td style="width: 33%;">2nd segment: 5.91%</td> <td style="width: 33%;">3rd segment: 6.65%</td> </tr> </table>	1st segment: 4.43%	2nd segment: 5.91%	3rd segment: 6.65%	☐ N/A, full yield curve used
1st segment: 4.43%	2nd segment: 5.91%	3rd segment: 6.65%				
b	Applicable month (enter code)	21b	4			
22	Weighted average retirement age	22	62			
23	Mortality table(s) (see instructions) ☐ Prescribed - combined ☒ Prescribed - separate ☐ Substitute					
Part VI	Miscellaneous Items					
24	Has a change been made in the non-prescribed actuarial assumptions for the current plan year? If "Yes," see instructions regarding required attachment. ☐ Yes ☐ No					
25	Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment. ☐ Yes ☐ No					
26	Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment. ☐ Yes ☐ No					
27	If the plan is subject to alternative funding rules, enter applicable code and see instructions regarding attachment.	27	1			
Part VII	Reconciliation of Unpaid Minimum Required Contributions For Prior Years					
28	Unpaid minimum required contributions for all prior years	28				
29	Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a)	29				
30	Remaining amount of unpaid minimum required contributions (line 28 minus line 29)	30				
Part VIII	Minimum Required Contribution For Current Year					
31	Target normal cost and excess assets (see instructions):					
a	Target normal cost (line 6)	31a				
b	Excess assets, if applicable, but not greater than line 31a	31b				
32	Amortization installments:	Outstanding Balance	Installment			
a	Net shortfall amortization installment					
b	Waiver amortization installment					
33	If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month _____ Day _____ Year _____) and the waived amount	33				
34	Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33)	34				
		Carryover balance	Prefunding balance			
35	Balances elected for use to offset funding requirement		Total balance			
36	Additional cash requirement (line 34 minus line 35)	36				
37	Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c)	37				
38	Present value of excess contributions for current year (see instructions)					
a	Total (excess, if any, of line 37 over line 36)	38a				
b	Portion included in line 38a attributable to use of prefunding and funding standard carryover balances	38b				
39	Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37)	39				
40	Unpaid minimum required contributions for all years	40				
Part IX	Pension Funding Relief Under Pension Relief Act of 2010 (See Instructions)					
41	If an election was made to use PRA 2010 funding relief for this plan:					
a	Schedule elected	☐ 2 plus 7 years ☐ 15 years				
b	Eligible plan year(s) for which the election in line 41a was made	☐ 2008 ☐ 2009 ☐ 2010 ☐ 2011				
42	Amount of acceleration adjustment	42				
43	Excess installment acceleration amount to be carried over to future plan years	43				

<div>SCHEDULE C</div> <div>(Form 5500)</div> <div>Department of the Treasury Internal Revenue Service</div> <div>Department of Labor Employee Benefits Security Administration</div> <div>Pension Benefit Guaranty Corporation</div>	<div>Service Provider Information</div> <div>This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA).</div> <div>▶ File as an attachment to Form 5500.</div>	OMB No. 1210-0110
		2016
		This Form is Open to Public Inspection.

For calendar plan year 2016 or fiscal plan year beginning 01/01/2016 and ending 12/31/2016

<div>A</div> <div>Name of plan</div> <div>RETIREMENT&SECURITY PROGRAM FOR EMPLOYEES OF NTCA AND ITS MEMBERS</div>	<div>B</div> <div>Three-digit plan number (PN)</div> <div>▶</div> <div>333</div>
<div>C</div> <div>Plan sponsor's name as shown on line 2a of Form 5500</div> <div>NATIONAL TELECOMMUNICATIONS COOPERATIVE ASSOCIATION</div>	<div>D</div> <div>Employer Identification Number (EIN)</div> <div>52-0741336</div>

Part I	Service Provider Information (see instructions)
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You must complete this Part, in accordance with the instructions, to report the information required for **each person** who received, directly or indirectly, \$5,000 or more in total compensation (i.e., money or anything else of monetary value) in connection with services rendered to the plan or the person's position with the plan during the plan year. If a person received **only** eligible indirect compensation for which the plan received the required disclosures, you are required to answer line 1 but are not required to include that person when completing the remainder of this Part.

1 Information on Persons Receiving Only Eligible Indirect Compensation

- a

Check "Yes" or "No" to indicate whether you are excluding a person from the remainder of this Part because they received only eligible indirect compensation for which the plan received the required disclosures (see instructions for definitions and conditions).....

☐ Yes ☒ No
- b

If you answered line 1a "Yes," enter the name and EIN or address of each person providing the required disclosures for the service providers who received only eligible indirect compensation. Complete as many entries as needed (see instructions).

(b) Enter name and EIN or address of person who provided you disclosures on eligible indirect compensation

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2. Information on Other Service Providers Receiving Direct or Indirect Compensation. Except for those persons for whom you answered "Yes" to line 1a above, complete as many entries as needed to list each person receiving, directly or indirectly, \$5,000 or more in total compensation (i.e., money or anything else of value) in connection with services rendered to the plan or their position with the plan during the plan year. (See instructions).

(a) Enter name and EIN or address (see instructions)

WISHIRE ASSOCIATES

95-2755361

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
27 50	NONE	136500	Yes ☐ No ☒	Yes ☐ No ☐		Yes ☐ No ☐

(a) Enter name and EIN or address (see instructions)

STATE STREET BANK AND TRUST COMPANY

04-1867445

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
51 19	NONE	45007	Yes ☒ No ☐	Yes ☒ No ☐	0	Yes ☒ No ☐

(a) Enter name and EIN or address (see instructions)

MAIL MANAGEMENT SERVICES

56-2075508

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
49 50	NONE	13750	Yes ☐ No ☒	Yes ☐ No ☐		Yes ☐ No ☐

2. Information on Other Service Providers Receiving Direct or Indirect Compensation. Except for those persons for whom you answered "Yes" to line 1a above, complete as many entries as needed to list each person receiving, directly or indirectly, \$5,000 or more in total compensation (i.e., money or anything else of value) in connection with services rendered to the plan or their position with the plan during the plan year. (See instructions).

(a) Enter name and EIN or address (see instructions)

GROOM LAW GROUP

52-1219029

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
29 50	NONE	215565	Yes ☐ No ☒	Yes ☐ No ☐		Yes ☐ No ☐

(a) Enter name and EIN or address (see instructions)

CLIFTONLARSONALLEN

47-0746749

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
10 50	NONE	35800	Yes ☐ No ☒	Yes ☐ No ☐		Yes ☐ No ☐

(a) Enter name and EIN or address (see instructions)

TOWERS WATSON

53-0181291

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
11 50	NONE	748092	Yes ☐ No ☒	Yes ☐ No ☐		Yes ☐ No ☐

2. Information on Other Service Providers Receiving Direct or Indirect Compensation. Except for those persons for whom you answered "Yes" to line 1a above, complete as many entries as needed to list each person receiving, directly or indirectly, \$5,000 or more in total compensation (i.e., money or anything else of value) in connection with services rendered to the plan or their position with the plan during the plan year. (See instructions).

(a) Enter name and EIN or address (see instructions)

SERVICE MANAGEMENT CORPORATION

52-1200541

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
13 50	SUBSIDIARY OF NTCA	2920032	Yes ☐ No ☒	Yes ☐ No ☐		Yes ☐ No ☐

(a) Enter name and EIN or address (see instructions)

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
			Yes ☐ No ☐	Yes ☐ No ☐		Yes ☐ No ☐

(a) Enter name and EIN or address (see instructions)

(b) Service Code(s)	(c) Relationship to employer, employee organization, or person known to be a party-in-interest	(d) Enter direct compensation paid by the plan. If none, enter -0-.	(e) Did service provider receive indirect compensation? (sources other than plan or plan sponsor)	(f) Did indirect compensation include eligible indirect compensation, for which the plan received the required disclosures?	(g) Enter total indirect compensation received by service provider excluding eligible indirect compensation for which you answered "Yes" to element (f). If none, enter -0-.	(h) Did the service provider give you a formula instead of an amount or estimated amount?
			Yes ☐ No ☐	Yes ☐ No ☐		Yes ☐ No ☐

Part I Service Provider Information (continued)

3. If you reported on line 2 receipt of indirect compensation, other than eligible indirect compensation, by a service provider, and the service provider is a fiduciary or provides contract administrator, consulting, custodial, investment advisory, investment management, broker, or recordkeeping services, answer the following questions for (a) each source from whom the service provider received \$1,000 or more in indirect compensation and (b) each source for whom the service provider gave you a formula used to determine the indirect compensation instead of an amount or estimated amount of the indirect compensation. Complete as many entries as needed to report the required information for each source.

(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
(d) Enter name and EIN (address) of source of indirect compensation	(e) Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
(d) Enter name and EIN (address) of source of indirect compensation	(e) Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.	
(a) Enter service provider name as it appears on line 2	(b) Service Codes (see instructions)	(c) Enter amount of indirect compensation
(d) Enter name and EIN (address) of source of indirect compensation	(e) Describe the indirect compensation, including any formula used to determine the service provider's eligibility for or the amount of the indirect compensation.	

Part II Service Providers Who Fail or Refuse to Provide Information

4 Provide, to the extent possible, the following information for each service provider who failed or refused to provide the information necessary to complete this Schedule.

(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide
(a) Enter name and EIN or address of service provider (see instructions)	(b) Nature of Service Code(s)	(c) Describe the information that the service provider failed or refused to provide

Part III Termination Information on Accountants and Enrolled Actuaries (see instructions)
(complete as many entries as needed)

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

a Name:	b EIN:
c Position:	
d Address:	e Telephone:

Explanation:

SCHEDULE D (Form 5500) <small>Department of the Treasury Internal Revenue Service</small> <small>Department of Labor Employee Benefits Security Administration</small>	DFE/Participating Plan Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA). ► File as an attachment to Form 5500.	OMB No. 1210-0110 <div style="text-align: center; font-size: 1.2em; font-weight: bold;">2016</div> This Form is Open to Public Inspection.
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For calendar plan year 2016 or fiscal plan year beginning 01/01/2016 and ending 12/31/2016

A Name of plan <u>RETIREMENT&SECURITY PROGRAM FOR EMPLOYEES OF NTCA AND ITS MEMBERS</u>	B Three-digit plan number (PN) ► <u>333</u>
C Plan or DFE sponsor's name as shown on line 2a of Form 5500 <u>NATIONAL TELECOMMUNICATIONS COOPERATIVE ASSOCIATION</u>	D Employer Identification Number (EIN) <u>52-0741336</u>

Part I	Information on interests in MTIAs, CCTs, PSAs, and 103-12 IEs (to be completed by plans and DFEs) (Complete as many entries as needed to report all interests in DFEs)
--------	--

a Name of MTIA, CCT, PSA, or 103-12 IE: R&S AND SAV PLAN OF NTCA MASTER TST

b Name of sponsor of entity listed in (a): NATIONAL TEL. COOP. ASSOCIATION

c EIN-PN <u>13-6044006-006</u>	d Entity code <u>M</u>	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) <u>2014371905</u>
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a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
-----------------	----------------------	---

a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
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a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
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a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
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a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
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a Name of MTIA, CCT, PSA, or 103-12 IE:

b Name of sponsor of entity listed in (a):

c EIN-PN	d Entity code	e Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions)
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For Paperwork Reduction Act Notice, see the Instructions for Form 5500.

a Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)**a** Name of MTIA, CCT, PSA, or 103-12 IE:**b** Name of sponsor of entity listed in (a):**c** EIN-PN**d** Entity
code**e** Dollar value of interest in MTIA, CCT, PSA, or
103-12 IE at end of year (see instructions)

Part II Information on Participating Plans (to be completed by DFEs)

(Complete as many entries as needed to report all participating plans)

a Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN**a** Plan name**b** Name of
plan sponsor**c** EIN-PN

SCHEDULE H (Form 5500) Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Financial Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA), and section 6058(a) of the Internal Revenue Code (the Code). ▶ File as an attachment to Form 5500.	OMB No. 1210-0110 2016 This Form is Open to Public Inspection
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For calendar plan year 2016 or fiscal plan year beginning 01/01/2016 and ending 12/31/2016		
A Name of plan RETIREMENT&SECURITY PROGRAM FOR EMPLOYEES OF NTCA AND ITS MEMBERS	B Three-digit plan number (PN) ▶	333
C Plan sponsor's name as shown on line 2a of Form 5500 NATIONAL TELECOMMUNICATIONS COOPERATIVE ASSOCIATION	D Employer Identification Number (EIN) 52-0741336	

Part I	Asset and Liability Statement
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1 Current value of plan assets and liabilities at the beginning and end of the plan year. Combine the value of plan assets held in more than one trust. Report the value of the plan's interest in a commingled fund containing the assets of more than one plan on a line-by-line basis unless the value is reportable on lines 1c(9) through 1c(14). Do not enter the value of that portion of an insurance contract which guarantees, during this plan year, to pay a specific dollar benefit at a future date. **Round off amounts to the nearest dollar.** MTIAs, CCTs, PSAs, and 103-12 IEs do not complete lines 1b(1), 1b(2), 1c(8), 1g, 1h, and 1i. CCTs, PSAs, and 103-12 IEs also do not complete lines 1d and 1e. See instructions.

Assets		(a) Beginning of Year	(b) End of Year
a Total noninterest-bearing cash	1a		
b Receivables (less allowance for doubtful accounts):			
(1) Employer contributions.....	1b(1)	79019903	175751550
(2) Participant contributions	1b(2)		
(3) Other.....	1b(3)	1794727	1430160
c General investments:			
(1) Interest-bearing cash (include money market accounts & certificates of deposit).....	1c(1)	2438408	2189381
(2) U.S. Government securities	1c(2)		
(3) Corporate debt instruments (other than employer securities):			
(A) Preferred	1c(3)(A)		
(B) All other.....	1c(3)(B)		
(4) Corporate stocks (other than employer securities):			
(A) Preferred	1c(4)(A)		
(B) Common.....	1c(4)(B)		
(5) Partnership/joint venture interests	1c(5)		
(6) Real estate (other than employer real property).....	1c(6)		
(7) Loans (other than to participants)	1c(7)		
(8) Participant loans.....	1c(8)		
(9) Value of interest in common/collective trusts	1c(9)		
(10) Value of interest in pooled separate accounts	1c(10)		
(11) Value of interest in master trust investment accounts	1c(11)	1737440945	2014371905
(12) Value of interest in 103-12 investment entities.....	1c(12)		
(13) Value of interest in registered investment companies (e.g., mutual funds).....	1c(13)		
(14) Value of funds held in insurance company general account (unallocated contracts).....	1c(14)		
(15) Other	1c(15)		

		(a) Beginning of Year	(b) End of Year
1d	Employer-related investments:		
(1)	Employer securities	1d(1)	
(2)	Employer real property	1d(2)	
e	Buildings and other property used in plan operation	1e	
f	Total assets (add all amounts in lines 1a through 1e)	1f	1820693983 2193742996
Liabilities			
g	Benefit claims payable	1g	
h	Operating payables	1h	1609950 1225364
i	Acquisition indebtedness	1i	
j	Other liabilities	1j	
k	Total liabilities (add all amounts in lines 1g through 1j)	1k	1609950 1225364
Net Assets			
l	Net assets (subtract line 1k from line 1f)	1l	1819084033 2192517632

Part II Income and Expense Statement

2 Plan income, expenses, and changes in net assets for the year. Include all income and expenses of the plan, including any trust(s) or separately maintained fund(s) and any payments/receipts to/from insurance carriers. Round off amounts to the nearest dollar. MTIAs, CCTs, PSAs, and 103-12 IEs do not complete lines 2a, 2b(1)(E), 2e, 2f, and 2g.

		(a) Amount	(b) Total
a	Contributions:		
(1)	Received or receivable in cash from: (A) Employers	2a(1)(A)	374622641
	(B) Participants	2a(1)(B)	12645885
	(C) Others (including rollovers)	2a(1)(C)	1404982
(2)	Noncash contributions	2a(2)	
(3)	Total contributions. Add lines 2a(1)(A) , (B) , (C) , and line 2a(2)	2a(3)	388673508
b	Earnings on investments:		
(1)	Interest:		
	(A) Interest-bearing cash (including money market accounts and certificates of deposit)	2b(1)(A)	111551
	(B) U.S. Government securities	2b(1)(B)	
	(C) Corporate debt instruments	2b(1)(C)	
	(D) Loans (other than to participants)	2b(1)(D)	
	(E) Participant loans	2b(1)(E)	
	(F) Other	2b(1)(F)	
	(G) Total interest. Add lines 2b(1)(A) through (F)	2b(1)(G)	111551
(2)	Dividends: (A) Preferred stock	2b(2)(A)	
	(B) Common stock	2b(2)(B)	
	(C) Registered investment company shares (e.g. mutual funds)	2b(2)(C)	
	(D) Total dividends. Add lines 2b(2)(A) , (B) , and (C)	2b(2)(D)	0
(3)	Rents	2b(3)	
(4)	Net gain (loss) on sale of assets: (A) Aggregate proceeds	2b(4)(A)	
	(B) Aggregate carrying amount (see instructions)	2b(4)(B)	
	(C) Subtract line 2b(4)(B) from line 2b(4)(A) and enter result	2b(4)(C)	0
(5)	Unrealized appreciation (depreciation) of assets: (A) Real estate	2b(5)(A)	
	(B) Other	2b(5)(B)	
	(C) Total unrealized appreciation of assets. Add lines 2b(5)(A) and (B)	2b(5)(C)	0

		(a) Amount	(b) Total
(6) Net investment gain (loss) from common/collective trusts	2b(6)		
(7) Net investment gain (loss) from pooled separate accounts	2b(7)		
(8) Net investment gain (loss) from master trust investment accounts	2b(8)		163896500
(9) Net investment gain (loss) from 103-12 investment entities	2b(9)		
(10) Net investment gain (loss) from registered investment companies (e.g., mutual funds).....	2b(10)		
c Other income.....	2c		
d Total income. Add all income amounts in column (b) and enter total.....	2d		552681559

Expenses

e Benefit payment and payments to provide benefits:			
(1) Directly to participants or beneficiaries, including direct rollovers	2e(1)	161513712	
(2) To insurance carriers for the provision of benefits	2e(2)		
(3) Other	2e(3)	2917462	
(4) Total benefit payments. Add lines 2e(1) through (3).....	2e(4)		164431174
f Corrective distributions (see instructions)	2f		
g Certain deemed distributions of participant loans (see instructions)	2g		
h Interest expense.....	2h		
i Administrative expenses: (1) Professional fees.....	2i(1)	1020941	
(2) Contract administrator fees.....	2i(2)	2990008	
(3) Investment advisory and management fees.....	2i(3)	11262	
(4) Other	2i(4)	10794575	
(5) Total administrative expenses. Add lines 2i(1) through (4).....	2i(5)		14816786
j Total expenses. Add all expense amounts in column (b) and enter total	2j		179247960

Net Income and Reconciliation

k Net income (loss). Subtract line 2j from line 2d	2k		373433599
l Transfers of assets:			
(1) To this plan.....	2l(1)		
(2) From this plan.....	2l(2)		

Part III Accountant's Opinion

3 Complete lines 3a through 3c if the opinion of an independent qualified public accountant is attached to this Form 5500. Complete line 3d if an opinion is not attached.

a The attached opinion of an independent qualified public accountant for this plan is (see instructions):

(1) ☒ Unqualified (2) ☐ Qualified (3) ☐ Disclaimer (4) ☐ Adverse

b Did the accountant perform a limited scope audit pursuant to 29 CFR 2520.103-8 and/or 103-12(d)? ☐ Yes ☒ No

c Enter the name and EIN of the accountant (or accounting firm) below:

(1) Name: CLIFTONLARSONALLEN, LLP

(2) EIN: 41-0746749

d The opinion of an independent qualified public accountant is **not attached** because:

(1) ☐ This form is filed for a CCT, PSA, or MTIA. (2) ☐ It will be attached to the next Form 5500 pursuant to 29 CFR 2520.104-50.

Part IV Compliance Questions

4 CCTs and PSAs do not complete Part IV. MTIAs, 103-12 IEs, and GIAs do not complete lines 4a, 4e, 4f, 4g, 4h, 4k, 4m, 4n, or 5. 103-12 IEs also do not complete lines 4j and 4l. MTIAs also do not complete line 4l.

During the plan year:

a Was there a failure to transmit to the plan any participant contributions within the time period described in 29 CFR 2510.3-102? Continue to answer "Yes" for any prior year failures until fully corrected. (See instructions and DOL's Voluntary Fiduciary Correction Program.).....

b Were any loans by the plan or fixed income obligations due the plan in default as of the close of the plan year or classified during the year as uncollectible? Disregard participant loans secured by participant's account balance. (Attach Schedule G (Form 5500) Part I if "Yes" is checked.)

	Yes	No	Amount
4a		X	
4b		X	

		Yes	No	Amount
c Were any leases to which the plan was a party in default or classified during the year as uncollectible? (Attach Schedule G (Form 5500) Part II if "Yes" is checked.)	4c		X	
d Were there any nonexempt transactions with any party-in-interest? (Do not include transactions reported on line 4a. Attach Schedule G (Form 5500) Part III if "Yes" is checked.)	4d		X	
e Was this plan covered by a fidelity bond?	4e	X		1400000
f Did the plan have a loss, whether or not reimbursed by the plan's fidelity bond, that was caused by fraud or dishonesty?	4f		X	
g Did the plan hold any assets whose current value was neither readily determinable on an established market nor set by an independent third party appraiser?	4g	X		278936479
h Did the plan receive any noncash contributions whose value was neither readily determinable on an established market nor set by an independent third party appraiser?	4h		X	
i Did the plan have assets held for investment? (Attach schedule(s) of assets if "Yes" is checked, and see instructions for format requirements.)	4i	X		
j Were any plan transactions or series of transactions in excess of 5% of the current value of plan assets? (Attach schedule of transactions if "Yes" is checked, and see instructions for format requirements.)	4j		X	
k Were all the plan assets either distributed to participants or beneficiaries, transferred to another plan, or brought under the control of the PBGC?	4k		X	
l Has the plan failed to provide any benefit when due under the plan?	4l		X	
m If this is an individual account plan, was there a blackout period? (See instructions and 29 CFR 2520.101-3.)	4m			
n If 4m was answered "Yes," check the "Yes" box if you either provided the required notice or one of the exceptions to providing the notice applied under 29 CFR 2520.101-3.	4n			
o Defined Benefit Plan or Money Purchase Pension Plan Only: Were any distributions made during the plan year to an employee who attained age 62 and had not separated from service?	4o			

5a Has a resolution to terminate the plan been adopted during the plan year or any prior plan year?
If "Yes," enter the amount of any plan assets that reverted to the employer this year. ☐ Yes ☒ No **Amount:**

5b If, during this plan year, any assets or liabilities were transferred from this plan to another plan(s), identify the plan(s) to which assets or liabilities were transferred. (See instructions.)

5b(1) Name of plan(s)	5b(2) EIN(s)	5b(3) PN(s)

5c If the plan is a defined benefit plan, is it covered under the PBGC insurance program (See ERISA section 4021.)? ☒ Yes ☐ No ☐ Not determined
If "Yes" is checked, enter the My PAA confirmation number from the PBGC premium filing for this plan year 3991522. (See instructions.)

Part V Trust Information

6a Name of trust	6b Trust's EIN
6c Name of trustee or custodian	6d Trustee's or custodian's telephone number

SCHEDULE R (Form 5500) Department of the Treasury Internal Revenue Service Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation	Retirement Plan Information This schedule is required to be filed under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6058(a) of the Internal Revenue Code (the Code). ▶ File as an attachment to Form 5500.	OMB No. 1210-0110 2016 This Form is Open to Public Inspection.
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For calendar plan year 2016 or fiscal plan year beginning 01/01/2016 and ending 12/31/2016

A Name of plan <u>RETIREMENT&SECURITY PROGRAM FOR EMPLOYEES OF NTCA AND ITS MEMBERS</u>	B Three-digit plan number (PN) ▶ <u>333</u>
C Plan sponsor's name as shown on line 2a of Form 5500 <u>NATIONAL TELECOMMUNICATIONS COOPERATIVE ASSOCIATION</u>	D Employer Identification Number (EIN) <u>52-0741336</u>

Part I	Distributions
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All references to distributions relate only to payments of benefits during the plan year.

1 Total value of distributions paid in property other than in cash or the forms of property specified in the instructions	1	<u>0</u>
2 Enter the EIN(s) of payor(s) who paid benefits on behalf of the plan to participants or beneficiaries during the year (if more than two, enter EINs of the two payors who paid the greatest dollar amounts of benefits): EIN(s): <u>04-6568107</u>		
Profit-sharing plans, ESOPs, and stock bonus plans, skip line 3.		
3 Number of participants (living or deceased) whose benefits were distributed in a single sum, during the plan year	3	<u>647</u>

Part II	Funding Information (If the plan is not subject to the minimum funding requirements of section 412 of the Internal Revenue Code or ERISA section 302, skip this Part.)
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4 Is the plan administrator making an election under Code section 412(d)(2) or ERISA section 302(d)(2)?	☐ Yes	☒ No	☐ N/A
If the plan is a defined benefit plan, go to line 8.			
5 If a waiver of the minimum funding standard for a prior year is being amortized in this plan year, see instructions and enter the date of the ruling letter granting the waiver. Date: Month _____ Day _____ Year _____ If you completed line 5, complete lines 3, 9, and 10 of Schedule MB and do not complete the remainder of this schedule.			
6 a Enter the minimum required contribution for this plan year (include any prior year accumulated funding deficiency not waived)	6a		
b Enter the amount contributed by the employer to the plan for this plan year	6b		
c Subtract the amount in line 6b from the amount in line 6a. Enter the result (enter a minus sign to the left of a negative amount)	6c		
If you completed line 6c, skip lines 8 and 9.			
7 Will the minimum funding amount reported on line 6c be met by the funding deadline?	☐ Yes	☐ No	☐ N/A
8 If a change in actuarial cost method was made for this plan year pursuant to a revenue procedure or other authority providing automatic approval for the change or a class ruling letter, does the plan sponsor or plan administrator agree with the change?	☐ Yes	☐ No	☒ N/A

Part III	Amendments
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9 If this is a defined benefit pension plan, were any amendments adopted during this plan year that increased or decreased the value of benefits? If yes, check the appropriate box. If no, check the "No" box.....	☐ Increase	☐ Decrease	☐ Both	☒ No
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Part IV	ESOPs (see instructions). If this is not a plan described under Section 409(a) or 4975(e)(7) of the Internal Revenue Code, skip this Part.
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10 Were unallocated employer securities or proceeds from the sale of unallocated securities used to repay any exempt loan?	☐ Yes	☐ No
11 a Does the ESOP hold any preferred stock?	☐ Yes	☐ No
b If the ESOP has an outstanding exempt loan with the employer as lender, is such loan part of a "back-to-back" loan? (See instructions for definition of "back-to-back" loan.)	☐ Yes	☐ No
12 Does the ESOP hold any stock that is not readily tradable on an established securities market?	☐ Yes	☐ No

For Paperwork Reduction Act Notice, see the Instructions for Form 5500.

Schedule R (Form 5500) 2016
v. 160205

Part V Additional Information for Multiemployer Defined Benefit Pension Plans

13 Enter the following information for each employer that contributed more than 5% of total contributions to the plan during the plan year (measured in dollars). See instructions. *Complete as many entries as needed to report all applicable employers.*

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

a Name of contributing employer

b EIN

c Dollar amount contributed by employer

d Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month _____ Day _____ Year _____

e Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) _____

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): _____

14	Enter the number of participants on whose behalf no contributions were made by an employer as an employer of the participant for:		
a	The current year	14a	
b	The plan year immediately preceding the current plan year	14b	
c	The second preceding plan year	14c	
15	Enter the ratio of the number of participants under the plan on whose behalf no employer had an obligation to make an employer contribution during the current plan year to:		
a	The corresponding number for the plan year immediately preceding the current plan year	15a	
b	The corresponding number for the second preceding plan year	15b	
16	Information with respect to any employers who withdrew from the plan during the preceding plan year:		
a	Enter the number of employers who withdrew during the preceding plan year	16a	
b	If line 16a is greater than 0, enter the aggregate amount of withdrawal liability assessed or estimated to be assessed against such withdrawn employers	16b	
17	If assets and liabilities from another plan have been transferred to or merged with this plan during the plan year, check box and see instructions regarding supplemental information to be included as an attachment. ☐		

Part VI	Additional Information for Single-Employer and Multiemployer Defined Benefit Pension Plans
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18	If any liabilities to participants or their beneficiaries under the plan as of the end of the plan year consist (in whole or in part) of liabilities to such participants and beneficiaries under two or more pension plans as of immediately before such plan year, check box and see instructions regarding supplemental information to be included as an attachment	☐
19	If the total number of participants is 1,000 or more, complete lines (a) through (c)	
a	Enter the percentage of plan assets held as: Stock: <u>51.0</u> % Investment-Grade Debt: <u>16.0</u> % High-Yield Debt: <u>10.0</u> % Real Estate: <u>10.0</u> % Other: <u>13.0</u> %	
b	Provide the average duration of the combined investment-grade and high-yield debt: ☐ 0-3 years ☐ 3-6 years ☐ 6-9 years ☒ 9-12 years ☐ 12-15 years ☐ 15-18 years ☐ 18-21 years ☐ 21 years or more	
c	What duration measure was used to calculate line 19(b)? ☒ Effective duration ☐ Macaulay duration ☐ Modified duration ☐ Other (specify):	

Part VII	IRS Compliance Questions
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20a Is the plan a 401(k) plan? If "No," skip b	☐ Yes ☐ No
20b How did the plan satisfy the nondiscrimination requirements for employee deferrals under section 401(k)(3) for the plan year? Check all that apply:	☐ Design-based safe harbor ☐ "Prior year" ADP test ☐ "Current year" ADP test ☐ N/A
21a What testing method was used to satisfy the coverage requirements under section 410(b) for the plan year? Check all that apply:	☐ Ratio percentage test ☐ Average benefit test ☐ N/A
21b Did the plan satisfy the coverage and nondiscrimination requirements of sections 410(b) and 401(a)(4) for the plan year by combining this plan with any other plan under the permissive aggregation rules?	☐ Yes ☐ No
22a If the plan is a master and prototype plan (M&P) or volume submitter plan that received a favorable IRS opinion letter or advisory letter, enter the date of the letter / / and the serial number	
22b If the plan is an individually-designed plan that received a favorable determination letter from the IRS, enter the date of the most recent determination letter / /	

**RETIREMENT & SECURITY PROGRAM OF
NTCA AND ITS MEMBERS**

FINANCIAL STATEMENTS

YEARS ENDED DECEMBER 31, 2016 AND 2015

**RETIREMENT & SECURITY PROGRAM OF NTCA AND ITS MEMBERS
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YEARS ENDED DECEMBER 31, 2016 AND 2015**

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*Certain Schedules are included with Form 5500 of the Master Trust (Annual Return/Report of Employee Benefit Plan) filed with the Department of Labor for the period ended December 31, 2016, and are not required to be disclosed for this Plan.

INDEPENDENT AUDITORS' REPORT

Trust Committee
Retirement & Security Program of
NTCA and its Members
Arlington, Virginia

Report on the Financial Statements

We have audited the accompanying financial statements of the Retirement & Security Program of NTCA and its Members (the Program), which comprise the statements of net assets available for benefits as of December 31, 2016 and 2015, and the related statements of changes in net assets available for benefits for the years then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Program's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Program's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Trust Committee
Retirement & Security Program of
NTCA and its Members

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial status of the Program as of December 31, 2016 and 2015, and the changes in financial status for the years then ended, in accordance with accounting principles generally accepted in the United States of America.

CliftonLarsonAllen LLP

CliftonLarsonAllen LLP

Arlington, Virginia
October 9, 2017

RETIREMENT & SECURITY PROGRAM OF NTCA AND ITS MEMBERS
STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS
DECEMBER 31, 2016 AND 2015

	<u>2016</u>	<u>2015</u>
ASSETS		
INVESTMENTS (AT FAIR VALUE)		
Interest in Master Trust	\$ 1,834,769,818	\$ 1,572,003,394
Net Assets Held in 401(h) Account	179,602,088	165,437,551
Total Investments	<u>2,014,371,906</u>	<u>1,737,440,945</u>
RECEIVABLES		
Contributions	175,751,550	79,019,903
Early Retirement Incentive	347,467	362,981
Prior-Service Benefits	877,579	1,403,105
Other	161,827	-
Total Receivables	<u>177,138,423</u>	<u>80,785,989</u>
CASH AND CASH EQUIVALENTS	2,189,380	2,438,408
PREPAID EXPENSES	<u>43,287</u>	<u>28,641</u>
Total Assets	2,193,742,996	1,820,693,983
LIABILITIES		
ACCOUNTS PAYABLE		
Custodial Trustee and Investment Managers' Fees	1,206,985	1,568,605
DUE TO NTCA AND AFFILIATES	18,379	41,345
AMOUNTS RELATED TO OBLIGATION OF 401(h) ACCOUNT	<u>179,602,088</u>	<u>165,437,551</u>
Total Liabilities	<u>180,827,452</u>	<u>167,047,501</u>
NET ASSETS AVAILABLE FOR BENEFITS	<u><u>\$ 2,012,915,544</u></u>	<u><u>\$ 1,653,646,482</u></u>

See accompanying Notes to Financial Statements.

RETIREMENT & SECURITY PROGRAM OF NTCA AND ITS MEMBERS
STATEMENTS OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
YEARS ENDED DECEMBER 31, 2016 AND 2015

	<u>2016</u>	<u>2015</u>
ADDITIONS:		
INVESTMENT INCOME		
Master Trust Investment Income	\$ 148,466,713	\$ 18,815,559
Interest	<u>111,551</u>	<u>156,851</u>
Total Investment Income	148,578,264	18,972,410
CONTRIBUTIONS		
Participant Contributions	12,645,885	12,307,114
Contributions from NTCA and Other Participating Employers	372,781,146	113,372,815
Assets Transferred from Other Plans	1,404,982	740,336
Other	<u>-</u>	<u>205,265</u>
Total Contributions	386,832,013	126,625,530
Total Additions	535,410,277	145,597,940
DEDUCTIONS:		
BENEFIT PAYMENTS		
Benefit Payments to Participants	159,470,397	167,981,424
Death Benefit Payments	<u>2,043,315</u>	<u>861,674</u>
Total Benefit Payments	161,513,712	168,843,098
ADMINISTRATIVE EXPENSES		
Administrative and Management Fees to SMC	2,920,032	2,682,168
Other Administrative Expenses	<u>11,707,471</u>	<u>9,496,325</u>
Total Administrative Expenses	14,627,503	12,178,493
Total Deductions	176,141,215	181,021,591
NET INCREASE (DECREASE)	359,269,062	(35,423,651)
NET ASSETS AVAILABLE FOR BENEFITS		
Beginning of Year	<u>1,653,646,482</u>	<u>1,689,070,133</u>
End of Year	<u>\$ 2,012,915,544</u>	<u>\$ 1,653,646,482</u>

See accompanying Notes to Financial Statements.

RETIREMENT & SECURITY PROGRAM OF NTCA AND ITS MEMBERS
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2016 AND 2015

NOTE 1 DESCRIPTION OF THE PROGRAM

The following description of the Retirement & Security Program of NTCA and its Members (the Program) provides only general information. Participants should refer to the Program's summary plan description and specifications for a more complete description of the Program's provisions. Copies of these documents are available from the National Telecommunications Cooperative Association (NTCA) or from a participating employer. The Program was most recently restated effective January 1, 2015 and amended effective January 1, 2017.

General

The Program is a multiple employer defined benefit pension plan covering many of the full-time employees of NTCA, its affiliates, and its members that have adopted the Program (collectively, the Participating Employers or Employers). The Program is subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA), as amended.

Contributions

Employers who adopt the Program make contributions monthly to the Program for all eligible employees. These contributions are calculated as a percentage of each participant's compensation with the percentage for each company specified in the Employer's adoption agreement. Certain Employers require participants to make contributions to the Program to receive the Employers' contribution. Such mandatory participant contributions are specified in the adoption agreement as a percent of salary, with a cap of 6 percent. Voluntary contributions by participants are not permitted.

In addition, each Employer contributes a surcharge contribution. Generally, the surcharge contribution for each such Program year is the sum of (i) the product of the Employer's surcharge contribution percentage times the compensation of the Employer's participants for the Program Year, plus (ii) the amount of any surcharge contributions for the Program year by the Employer on behalf of disabled participants. The Surcharge Contribution Percentage for the 2016 Plan Year for a 5/19/2015 Participating Member is the product of (i) 25% times (ii) the sum of the following percentages elected under or pursuant to the 5/19/15 Participating Member's Adoption Agreement: Section C, Rule-of-85, and Section G, Member Contributions and Participant Contributions for active Employees, in effect on May 19, 2015. The Surcharge Contribution Percentage for the 2016 Plan Year for a Participating Member that is not a 5/19/2015 Participating Member is the highest Surcharge Contribution Percentage of any 5/19/2015 Participating Member in the same Controlled Group as such Participating Member. The Surcharge Contribution Percentage for the 2015 Plan Year for a 5/16/2014 Participating Member is the product of (i) 25% times (ii) the sum of the following percentages elected under or pursuant to the 5/16/2014 Participating Member's Adoption Agreement: Section C, Rule-of-85, and Section G, Member Contributions and Participant Contributions for active Employees, in effect on May 16, 2013. The Surcharge Contribution Percentage for the 2015 Plan Year for a Participating Member that is not a 5/16/2014 Participating Member is the highest Surcharge Contribution Percentage of any 5/16/2014 Participating Member in the same Controlled Group as such Participating Member.

RETIREMENT & SECURITY PROGRAM OF NTCA AND ITS MEMBERS
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2016 AND 2015

NOTE 1 DESCRIPTION OF THE PROGRAM (CONTINUED)

Contributions (Continued)

Participating Employers may not require employees to make contributions at a rate in excess of 100% of the rate of Employer contributions. This limitation only applies to changes to Employer or employee rates after the effective date and will not need to be retroactively applied to adoption agreements already in effect at that date.

Employers also may elect to fund prior service benefits for participants on a non-discriminatory basis. The Employer may fund these benefits either by a lump sum payment or by installment payments, with interest charged at an actuarially determined rate on the unpaid balance.

Participants may roll over qualified lump sum distributions from prior employers into the Program.

The Program meets the ERISA minimum funding requirements.

Effective July 1, 2016, a participating member may make a "Prefunding Election." This is a written election to prefund the Participating Member's expected program surcharge contributions. The Participating Member may pay this prefunding contribution on or before September 15, 2017, unless extended by the Committee.

401(h) Accounts

The Program provides a post-retirement medical benefit component in addition to the normal retirement benefits of the Program, pursuant to Section 401(h) of the Internal Revenue Code (IRC). These benefits are Employer funded, subject to certain restrictions and limitations, and can be disbursed only to reimburse participating Employers for payment of certain non-pension retiree health benefits, as outlined in the Program's provisions. If an Employer were to withdraw from the Program, or if the Program were to be terminated, all 401(h) amounts on deposit in the trust would revert to the Employer that established and funded the account. Distributions to the Program's participants are not permitted. Because the 401(h) net assets may not be used to satisfy Plan obligations, the total net assets available for benefits does not include net assets held in the 401(h) account. The Plan's statements of changes in net assets available for benefits do not include any of the components of the changes in the 401(h) net assets.

Pension, Death and Disability Benefits

If an employee dies prior to retirement while covered under the Program, the participant's beneficiary is entitled to a pre-retirement death benefit. For participants who die prior to age 65, the basic death benefit is generally 100 times the monthly pension that would have been payable had the participant survived until age 65 and retired. After age 65, the basic death benefit equals the present value of the participant's accrued retirement benefit as of the date of death.

The Program permits payments of a lump sum benefit if elected by non-spousal beneficiaries of non-retired participants who die on or after age 55.

RETIREMENT & SECURITY PROGRAM OF NTCA AND ITS MEMBERS
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2016 AND 2015

NOTE 1 DESCRIPTION OF THE PROGRAM (CONTINUED)

Pension, Death and Disability Benefits (Continued)

Participants who retire at age 65 (the Program's normal retirement age) or age 55 (the Program's early retirement age) or at an age between those two are entitled to a monthly annuity or a lump sum payment. There is no minimum service requirement to qualify for this benefit; however, the benefit payable generally is reduced actuarially if the participant retires before normal retirement age. However, companies may pay an additional amount to provide employees an unreduced benefit as early as age 55. In addition, if a participant's age is at least 55 and age and service years added together equal at least 85 at retirement, the participant can receive an unreduced benefit when retiring before age 65. This benefit provision is called the "Rule-of-85."

The normal benefit payable is calculated using the participant's highest five compensation years from the last 10 years of credited service, multiplied by the sum of accumulated company and participant net contribution percentages made prior to January 1, 2008, and the actuarial factor of 0.2168 plus the sum of accumulated company and participant net contribution percentages made between January 1, 2008 and December 31, 2013, and the actuarial factor of 0.2091 plus the sum of accumulated company and participant net contribution percentages made between January 1, 2014 and December 31, 2016, and the actuarial factor of 0.1855 plus the sum of accumulated company and participant net contribution percentages made after December 31, 2016, and the actuarial factor of 0.1531. If the retiring employee is under age 65, the benefit then is actuarially reduced, unless the participant qualifies under the Rule-of-85 outlined above. In certain limited circumstances, a participant's accrued benefit may be calculated differently in order to conform to Program and legal requirements.

For married participants who retire, the normal form of benefit is a 50% joint and survivor benefit. For other participants, the normal form of benefit is a life annuity with payment guaranteed for 10 years. Optional forms of benefits (including a 75% joint and survivor benefit, a 100% joint and survivor benefit, a lump sum payment, etc.) are also available to retiring participants. Married retirees, however, must obtain spousal consent for any benefit election that does not provide a monthly survivor benefit of at least 50%. The Program permits certain eligible participants, without regard to their age, to roll over a lump sum distribution of benefits to the NTCA Savings Plan. The number of days required for participants to receive notice of a reduction in accrued benefits is 45 days.

Participants who receive a Program distribution and subsequently return to work for a participating member company are permitted to restore their previous accrued benefit with contributions, including from an eligible rollover distribution, within five years of their re-employment date.

The Program automatically cash-outs account balances of \$1000 or less and rolls into an IRA any terminated employees account balance that is between \$1000 and \$5000.

The Program requires distribution of benefits to terminated participants at the Program's normal retirement age (65).

RETIREMENT & SECURITY PROGRAM OF NTCA AND ITS MEMBERS
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2016 AND 2015

NOTE 1 DESCRIPTION OF THE PROGRAM (CONTINUED)

Pension, Death and Disability Benefits (Continued)

The Program provides for the purchase of a group annuity contract to assume the Program's liability for benefits payable to participants, beneficiaries, and retirees of employers that withdraw from the Program after April 30, 2013.

The Program provides for the purchase of a group annuity contract to assume the Program's liability for benefits payable to participants, beneficiaries, and retirees of employers who were not active participating members as of December 31, 2012.

Effective January 1, 2014, the Program added 10-year certain, Social Security leveling, and combination lump-sum and annuity features to the 75% joint and survivor benefit.

The Program does not provide pension benefits on the basis of participant disability.

Participants are fully vested immediately in their accrued benefits.

NOTE 2 SUMMARY OF ACCOUNTING POLICIES

Basis of Accounting

The financial statements are prepared on the accrual basis of accounting.

Fair Value Measurements

The Program categorizes its assets and liabilities measured at fair value into a three-level hierarchy based on the priority of the inputs to the valuation technique used to determine fair value. That framework provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements).

The three levels of the fair value hierarchy are described as follows:

Level 1: Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Program has the ability to access.

Level 2: Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly, such as:

- quoted prices for similar assets or liabilities in active markets;
- quoted prices for identical or similar assets or liabilities in inactive markets;
- inputs other than quoted prices that are observable for the asset or liability;
- inputs that are derived principally from or corroborated by observable market data by correlation or other means.

RETIREMENT & SECURITY PROGRAM OF NTCA AND ITS MEMBERS
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2016 AND 2015

NOTE 2 SUMMARY OF ACCOUNTING POLICIES (CONTINUED)

If the asset or liability has a specified (contractual) term, the Level 2 input must be observable for substantially the full term of the asset or liability.

Level 3: Inputs to the valuation methodology are unobservable and significant to the fair market value measurement.

The asset or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques used need to maximize the use of observable inputs and minimize the use of unobservable inputs. There have been no changes in the valuation methodologies used at December 31, 2016 and 2015.

Investment Valuation and Income Recognition

The fair value of the Plan's interest in the master trust is based on the beginning of year value of the Plan's interest in the trust plus actual contributions and allocated investment income less actual distributions and allocated administrative expenses. The Program's Board of Directors determines the valuation policies utilizing information provided by the investment advisor and trustee. See Note 5 for a discussion of fair value of investments.

Interest income is recorded on the accrual basis.

Cash and Cash Equivalents

Cash equivalents include overnight repurchase agreements that are collateralized by a bank at an amount equal to at least 100% of the resale price. The collateral consists of U.S. Treasury or agency securities and is required to be held in a segregated custody account. In the event of default, the Program has the right to liquidate the collateral and apply the proceeds in satisfaction of the obligation.

A portion of these funds, \$693,932 and \$676,354, represents the Program's interest as of December 31, 2016 and 2015, respectively, in a lockbox bank account held jointly with NTCA and used for initial deposits of plan-related employer payments.

Actuarial Present Value of Accumulated Benefits

Accumulated Program benefits are those estimated future periodic payments, including lump sum distributions, that are attributable under the Program's provisions to services rendered by the participants to the valuation date. Accumulated benefits include benefits expected to be paid to retired or terminated employees of NTCA and participating member systems or their beneficiaries, and to present employees or their beneficiaries.

Benefits under the Program are based on a participant's highest five compensation years from the last 10 years of credited service. The accumulated benefits for active participants are based upon estimated average compensation during the years preceding the valuation date. Benefits payable under all circumstances (e.g., retirement, termination of employment and death) are included to the extent they are deemed attributable to employee service rendered to the valuation date. Present employees' accumulated contributions, including interest, as of January 1, 2016 were \$142,790,277. Interest was credited on employees' contributions at a rate of 2.17% for 2016.

RETIREMENT & SECURITY PROGRAM OF NTCA AND ITS MEMBERS
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2016 AND 2015

NOTE 2 SUMMARY OF ACCOUNTING POLICIES (CONTINUED)

Contributions

The Program records contributions in the period they are due. Contributions received through September 15 are allocated to the prior year in order to minimize the Program's unfunded vested benefits as defined by the Pension Benefit Guaranty Corporation (PBGC). At December 31, 2016 and 2015, contributions receivable and contributions revenue include amounts estimated to be received by the Program through September 15, 2017 and 2016, respectively.

Benefit Payments

Benefits are recorded in the period of distribution.

Use of Estimates

The accompanying financial statements are prepared in accordance with U.S. generally accepted accounting principles (GAAP). The preparation of financial statements in accordance with GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

Administrative Expenses

The Plan's expenses are paid by the Program. Certain expenses incurred in connection with the general administration of the Program that are paid by the Program are recorded as administrative expenses in the accompanying Statements of Changes in Net Assets Available for Benefits. In addition, certain investment related expenses are included in master trust investment income presented in the accompanying Statement of Changes in Net Assets Available for Benefits.

Subsequent Events

In preparing these financial statements, the Program has evaluated events and transactions for potential recognition or disclosure through October 9, 2017, the date the financial statements were available to be issued. The Program was amended effective January 1, 2018 to remove the 6% required maximum employee contribution, and effective January 1, 2019 to allow a member company to freeze R&S Program participation to new employees, or a "soft freeze."

NOTE 3 CONCENTRATION OF CREDIT RISK

The Federal Deposit Insurance Corporation (FDIC) insures bank balances up to \$250,000 per depositor, per insured bank. Management monitors these balances and believes they do not represent significant credit risk to the Program.

RETIREMENT & SECURITY PROGRAM OF NTCA AND ITS MEMBERS
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2016 AND 2015

NOTE 4 INVESTMENTS

All of the Program's investments are held in the Master Trust which was established for the investment of assets of the Program and 401(h) investments. The Program and 401(h) accounts each have an undivided interest in the Master Trust. The assets of the Master Trust are held by State Street Bank pursuant to the provisions of the Employee Benefit Plan Trust Agreement. At December 31, 2016 and 2015, the Program and 401(h) account's interest in the net assets of the Master Trust was approximately 96.2% and 95.9%, respectively. Investment income and administrative expenses relating to the Master Trust are allocated to the individual plans based upon their proportionate interest in the Master Trust fund. The value of the Program's interest in the Master Trust is based on the beginning of year value of the Program's interest in the trust plus actual contributions and allocated investment income less actual distributions and allocated administrative expenses.

The following table presents the net assets of the Master Trust at December 31:

	<u>2016</u>	<u>2015</u>
Investments at Fair Value:		
Short-Term Investments	\$ 38,079,105	\$ 26,093,476
Corporate Bonds	100,436,548	82,718,336
Common Stocks	325,854,976	279,447,589
Mutual Funds and Exchange Traded Funds	60,373,233	59,551,175
Collective Trust Funds	1,279,370,156	1,080,761,888
Real Estate Investment Trust	7,767,301	18,911,674
Private Equity Investments	278,936,479	260,392,889
Unrealized Appreciation (Depreciation) on Foreign Exchange Receivables	(657,318)	511,297
Unrealized Appreciation (Depreciation) on Foreign Exchange Payables	40,891	228,933
	<u>2,090,201,371</u>	<u>1,808,617,257</u>
Receivables (Payables):		
Due from Brokers for Securities Sold	72,722,416	89,213,430
Due to Brokers for Securities Purchased	(70,665,027)	(88,653,324)
Tax Reclamation	298,943	173,493
Accrued Investment Income	2,040,549	1,746,580
Total Receivables (Payables)	<u>4,396,881</u>	<u>2,480,179</u>
Net Assets of Master Trust	<u><u>\$ 2,094,598,252</u></u>	<u><u>\$ 1,811,097,436</u></u>

RETIREMENT & SECURITY PROGRAM OF NTCA AND ITS MEMBERS
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2016 AND 2015

NOTE 4 INVESTMENTS (CONTINUED)

Investment income for the Master Trust is as follows for the years ended December 31:

	<u>2016</u>	<u>2015</u>
Net Appreciation (Depreciation) in Fair Value of Investments:	\$ 152,129,569	\$ 11,613,435
Interest	5,859,171	5,640,499
Dividends	10,490,712	9,649,500
Other income	5,436,636	-
Investment Expenses	(3,434,822)	(4,594,811)
Total Master Trust Investment Income	<u>\$ 170,481,266</u>	<u>\$ 22,308,623</u>

Private Equity Funds

The Program's investment policy permits up to 10% of the Program's assets to be invested with various private equity managers. The strategy of the private equity component of the investment portfolio aims to build a diversified pool of managers with different investment focuses and expertise in order to produce returns in excess of those available in the public equity markets. As of December 31, 2016 and 2015, the Program invests across different private equity, distressed debt, and mezzanine financing. Additionally, in order to further diversify the portfolio, investments are made across time or vintage year in order to avoid any attempt to time the market.

Given the illiquid nature of private equity, investments generally cannot be sold at will and therefore a long-term outlook is required. Further, quarterly valuations are inherently subjective as they represent the best estimate of value in the absence of a readily observable market for pricing private equity investments. The underlying securities of the private equities investments include limited partnership interests in private equity venture partnerships, all of which carry restrictions on redemption.

As of December 31, 2016 and 2015, the Program has committed a total of \$263,780,650 and \$265,745,466, respectively, to various private equity managers. As of December 31, 2016 and 2015, remaining amounts on these commitments were \$49,896,335 and \$71,728,011, respectively.

NOTE 5 FAIR VALUE MEASUREMENT

The investments of the Program are held in the R&S Program and Savings Plan of NTCA and its Members Employee Benefit Trust (Master Trust), created to invest the assets of the Program along with the assets of the 401(h) component of the Savings Plan of the NTCA and its Members (Savings Plan). Following is a description of the valuation methodologies used for assets held in the Master Trust which are measured at fair value.

RETIREMENT & SECURITY PROGRAM OF NTCA AND ITS MEMBERS
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2016 AND 2015

NOTE 5 FAIR VALUE MEASUREMENT (CONTINUED)

Investments in short-term investments are stated at cost, which approximates fair value. Investments in corporate bonds are valued on yields currently available on comparable securities of issuers with similar credit ratings. Investments in common stocks, foreign exchange contracts, and exchange-traded funds are valued at the closing price reported in the actual market in which the individual security is traded. Mutual funds held by the Plan are open-end mutual funds that are registered with the Securities and Exchange Commission. These funds are required to publish their daily net asset value (NAV) and to transact at that price. Investments in foreign securities are reported at their foreign currency denominated fair value and are converted into U.S. dollars using current exchange rates.

Investments in collective trust funds and real estate investment trusts are valued based on NAV of units, which are based on observable prices of the underlying assets, held by the Master Trust at year-end. For certain funds NAV is a readily determinable fair value and is the basis for current transactions. These funds are included in Level 2.

Investments in private equity investments, which are not readily marketable, are carried at their estimated NAV as provided by the investment managers and are included as investments measured at net asset value. The Program reviews and evaluates the values provided by the investment manager and agrees with the valuation methods and assumptions used in determining the fair value of the alternative investments. Those estimated fair values may differ significantly from the values that would have been used had a ready market for these investments existed.

RETIREMENT & SECURITY PROGRAM OF NTCA AND ITS MEMBERS
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NOTE 5 FAIR VALUE MEASUREMENT (CONTINUED)

The following tables set forth by level, within the fair value hierarchy, the Master Trust's assets at fair value as of December 31:

2016				
	Level 1	Level 2	Level 3	Total
Short-Term Investments	\$ 38,079,105	\$ -	\$ -	\$ 38,079,105
Corporate Bonds	-	100,436,548	-	100,436,548
Common Stocks	325,854,976	-	-	325,854,976
Mutual Funds and Exchange-Traded Funds	60,373,233	-	-	60,373,233
Collective Trust Funds	-	1,109,448,898	-	1,109,448,898
Real Estate Investment Trust	-	6,196,109	-	6,196,109
Unrealized Depreciation on Foreign Exchange Receivables	(657,318)	-	-	(657,318)
Unrealized Appreciation on Foreign Exchange Payables	40,891	-	-	40,891
Total Investment in the Fair Value Hierarchy	<u>\$ 423,690,887</u>	<u>\$ 1,216,081,555</u>	<u>\$ -</u>	<u>\$ 1,639,772,442</u>
Investment Measured at Net Asset Value				450,428,929
Total Investment at Fair Value				<u>\$ 2,090,201,371</u>

2015				
	Level 1	Level 2	Level 3	Total
Short-Term Investments	\$ 26,093,476	\$ -	\$ -	\$ 26,093,476
Corporate Bonds	-	82,718,336	-	82,718,336
Common Stocks	279,447,589	-	-	279,447,589
Mutual Funds and Exchange-Traded Funds	59,551,175	-	-	59,551,175
Collective Trust Funds	-	936,504,796	-	936,504,796
Real Estate Investment Trust	-	17,344,753	-	17,344,753
Unrealized Appreciation on Foreign Exchange Receivables	511,297	-	-	511,297
Unrealized Depreciation on Foreign Exchange Payables	228,933	-	-	228,933
Total Investment in the Fair Value Hierarchy	<u>\$ 365,832,470</u>	<u>\$ 1,036,567,885</u>	<u>\$ -</u>	<u>\$ 1,402,400,355</u>
Investment Measured at Net Asset Value				406,216,902
Total Investment at Fair Value				<u>\$ 1,808,617,257</u>

RETIREMENT & SECURITY PROGRAM OF NTCA AND ITS MEMBERS
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NOTE 5 FAIR VALUE MEASUREMENT (CONTINUED)

The following table summarizes investments for which fair value is measured using the net asset per share practical expedient as of December 31. There are no participant redemption restrictions for these investments; the redemption notice period is applicable only to the Plan.

Investment Type	2016 Fair Value	2015 Fair Value	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Collective Trust Funds					
Index Collective Trust Fund	\$ 105,409,310	\$ 84,731,577	\$ -	Monthly	Monthly
Real Estate Collective Trust Fund	64,511,948	59,525,516	-	Quarterly	Quarterly
Real Estate Investment Trust	1,571,192	1,566,921	-	Monthly	Monthly
Private Equity Investments					
Abbott Capital PVT EQ FD VI LP	31,706,555	28,974,665	3,690,000	Annual	Annual
Dover Street VII Cayman Fund LP	10,742,059	15,733,137	1,593,750	Annual	Annual
Cayman Venture Fund LP	4,248,757	5,120,737	114,000	Annual	Annual
Mezzanine Distressed Debit Fund LP	1,445,639	1,689,756	152,000	Annual	Annual
Cayman Buyout Fund L P	15,326,047	16,832,764	1,680,000	Annual	Annual
Quellos Private Capital III	25,558,705	30,229,642	1,841,616	Annual	Annual
Dover Street VIII	14,302,915	12,276,101	3,300,000	Annual	Annual
Fort Washington Private Equity Investors VIII LP	10,230,763	4,492,019	15,800,000	Quarterly	Quarterly
Fort Washington Private Equity Investors VII LP	18,585,631	15,665,044	5,000,000	Quarterly	Quarterly
Harbourvest 2015 Global Fund L	6,910,423	1,215,386	13,500,000	Annual	Annual
HIPEP VI Cayman Partnership Fund	13,383,374	12,082,748	2,514,969	Annual	Annual
Harbourvest Partners IX	14,204,985	11,837,480	6,560,000	Annual	Annual
Heitman America Real Estate	65,169,301	59,752,109	-	Quarterly	Quarterly
UBS Agrivest Farmland	47,121,325	44,491,300	-	Quarterly	Quarterly
	<u>\$ 450,428,929</u>	<u>\$ 406,216,902</u>			

The index collective fund includes investments that seek to approximate the risk and return characterized by the Russell 1000 Growth Index, Russell 1000 Value Index, S&P 500 Index, Morgan Stanley Capital International EAFE Index, Morgan Stanley Capital International Emerging Markets Free Index and Barclays Capital Aggregate Bond Index. To achieve their objective, the accounts employ a replication technique, which generally seeks to hold each index constituent in its proportional index weight.

The real estate collective trust fund includes investments that seek to produce a moderate to high level of current income and high residual property appreciation by investing in a wide variety of value-added real estate opportunities, including improved real estate projects with stabilized occupancies.

The real estate investment trust fund includes investments that seek to produce a moderate to high level of current income and high residual property appreciation by investing in a wide variety of value-added real estate opportunities, including improved real estate projects with stabilized occupancies.

The Abbott Capital PVT EQ FD VI LP seeks to maximize the return to its partners by participating in private equity and equity-related investments through a diversified portfolio of venture capital and growth equity, buyout, and special situations partnership and other limited liability vehicles.

RETIREMENT & SECURITY PROGRAM OF NTCA AND ITS MEMBERS
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NOTE 5 FAIR VALUE MEASUREMENT (CONTINUED)

The Dover Street VII Cayman Fund LP makes investments in limited partnerships or other pooled investment vehicles which invest in equity-oriented investments in growing or emerging companies in the United States, Europe, Latin America, Asia and emerging private equity markets.

The Cayman Venture Fund LP seeks to make investments with a primary emphasis on equity-oriented investments in young, growing, or emerging companies or entities and other private equity transactions.

The Mezzanine Distressed Debt Fund LP and the HarbourVest 2015 Global Fund LP seek to make investments in limited partnerships or other pooled investment vehicles which, in turn make private equity investments and to invest directly in private equity investments.

The Cayman Buyout Fund LP seeks to make investments with a primary emphasis on equity-oriented investments in venture capital, management buy-in, leveraged buy-out, mezzanine, special situations, and recapitalization transactions.

The Quellos Private Capital III seeks to make investments in a diversified portfolio of opportunities within the private capital sector.

The Dover Street VIII Fund seeks to make investments with a primary emphasis on equity-oriented investments in venture capital, management buy-in, leveraged buy-out, mezzanine, special situations, and recapitalization transactions.

The Fort Washington Private Equity Investors VIII LP Fund seeks to realize capital appreciation primarily by investing in a diversified portfolio of leading private equity funds that exhibit an attractive investment strategy.

The Fort Washington Private Equity Investors VII LP seeks to invest in (1) a diversified portfolio of primary market interests in pooled investment vehicles or managed private equity investment funds, organized as limited partnerships, limited liability companies or corporations, including venture capital, buyout, and distressed securities funds, (2) a diversified portfolio of secondary market interests in established pooled investment vehicles or managed private equity investment funds, organized as limited partnerships, limited liability companies or corporations, including venture capital, buyout and distressed securities funds, and (3) co-investment opportunities offered primarily by the partners or members of the investee partnerships and at the discretion of the General Partner, in co-investment opportunities offered primarily by other funds to affiliates of the General Partner.

The HIPEP VI Cayman Partnership Fund seeks to make investments in limited partnerships or other pooled investment vehicles which, in turn, make equity-oriented investments in management buy-in, management buy-out, leveraged buy-out, venture capital, growth and expansion capital, mezzanine, distressed and venture debt, special situation and recapitalization transactions and other private equity transactions.

RETIREMENT & SECURITY PROGRAM OF NTCA AND ITS MEMBERS
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NOTE 5 FAIR VALUE MEASUREMENT (CONTINUED)

The HarbourVest Partners IX is designed to hold investments in HarbourVest Partners IX-Cayman Buyout Fund L.P. in an amount equal to sixty percent of the aggregate capital commitments of the partners, in HarbourVest Partners IX-Cayman Venture Fund L.P. in an amount equal to thirty percent of the aggregate capital commitments of the partners and in HarbourVest Partners IX-Cayman Credit Opportunities Fund L.P. in an amount equal to ten percent of the aggregate Capital Commitments of the Partners. HarbourVest Partners IX-Cayman Buyout Fund L.P., HarbourVest Partners IX Cayman Venture Fund L.P. and HarbourVest Partners IX-Cayman Credit Opportunities Fund L.P., (collectively, the "Partnerships") in turn, make investments as limited partners in HarbourVest Partners IX-Buyout Fund L.P., HarbourVest Partners IX-Venture Fund L.P. and HarbourVest Partners IX-Credit Opportunities Fund L.P., (collectively, the "Master Funds") in an amount equal to the aggregate capital commitments of the partners.

The Heitman America Real Estate seeks to create a high-quality, low risk, diversified portfolio of stabilized, income-producing real estate investments.

The UBS Agrivest Farmland seeks to invest in a diversified portfolio of row, vegetable and permanent crop farmland in select major agricultural states in the United States.

NOTE 6 DERIVATIVES AND HEDGING ACTIVITIES

The Trustees of the Program have authorized certain investment managers to invest in derivative instruments for hedging purposes. As a global institutional investor, the Master Trust is in a position to take advantage of derivative instruments to ensure overall investment performance objectives are achieved as specified. Investment managers may utilize derivatives for risk control and substitution. Speculation is not permitted. Under no circumstances is a manager permitted to leverage the Master Trust's portfolio with derivatives. The Master Trust allows the use of forwards, futures, and options.

The Master Trust purchases derivatives in carrying out its international enhanced equity strategy. The types of derivatives include: (1) forward foreign currency exchange contracts principally used for risk control by hedging a portion of the Master Trust's portfolio to minimize exposure to foreign exchange risk, and (2) exchange traded futures to manage exposure to international markets more rapidly and less expensively than can be accomplished through the use of cash markets.

When engaging in forward exchange contracts, there is exposure to credit loss in the event of nonperformance by the counterparties to these transactions. To lessen this risk, individual counterparty exposure is limited to 25% of the total market value of exposure created by all derivatives (calculated at the time of purchase).

RETIREMENT & SECURITY PROGRAM OF NTCA AND ITS MEMBERS
NOTES TO FINANCIAL STATEMENTS
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NOTE 6 DERIVATIVES AND HEDGING ACTIVITIES (CONTINUED)

The Master Trust does not anticipate nonperformance by counterparties to these contracts, and no material loss would be expected from any such nonperformance.

In connection with its derivative activities, the Program generally enters into master netting agreements and collateral agreements with its counterparties. These agreements provide the Program with the right in the event of a default by the counterparty, to net a counterparty's rights and obligations under the agreement and to liquidate and setoff collateral against any net amounts owed by the counterparty. The enforceability of the master netting agreement is taken into account in the Program's risk management practices and application of counterparty credit limits. The following tables present information about the offsetting of derivative instruments and related collateral amounts:

At December 31, 2016						
	Gross Amounts	Amounts Offset in the Consolidated Statement of Financial	Net Amounts Presented in the Consolidated Statement of	Amounts Not Offset in the		Net Exposure
				Financial Instruments Collateral	Other Cash Collateral	
Derivative Assets						
Australian Dollar	\$ 2,256,250	\$ 2,198,985	\$ (57,265)	\$ -	\$ -	\$ (57,265)
Canadian Dollar	4,250,744	4,251,087	343	-	-	343
Danish Krone	189,279	186,679	(2,600)	-	-	(2,600)
Euro Currency	2,393,265	2,412,203	18,938	-	-	18,938
Hong Kong Dollar	420,811	420,850	39	-	-	39
New Israeli Shekel	719,882	715,924	(3,958)	-	-	(3,958)
Japanese Yen	15,411,023	15,031,292	(379,731)	-	-	(379,731)
New Zealand Dollar	2,974,097	2,930,624	(43,473)	-	-	(43,473)
Norwegian Krone	6,457,527	6,359,818	(97,709)	-	-	(97,709)
Pound Sterling	3,091,716	3,007,859	(83,857)	-	-	(83,857)
Singapore Dollar	619,051	613,060	(5,991)	-	-	(5,991)
Swedish Krona	178,399	177,947	(452)	-	-	(452)
Swiss Franc	150,827	149,225	(1,602)	-	-	(1,602)
Total Derivative Assets	<u>\$ 39,112,871</u>	<u>\$ 38,455,553</u>	<u>\$ (657,318)</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ (657,318)</u>
Australian Dollar	\$ 419,890	\$ 424,327	\$ (4,437)	\$ -	\$ -	\$ (4,437)
Canadian Dollar	4,987,058	4,925,021	62,037	-	-	62,037
Danish Krone	474,786	470,186	4,600	-	-	4,600
Euro Currency	4,398,914	4,340,696	58,218	-	-	58,218
Hong Kong Dollar	174,205	174,300	(95)	-	-	(95)
New Israeli Shekel	5,207	5,207	-	-	-	-
Japanese Yen	1,798,596	1,808,603	(10,007)	-	-	(10,007)
New Zealand Dollar	-	-	-	-	-	-
Norwegian Krone	-	-	-	-	-	-
Pound Sterling	1,619,832	1,610,380	9,452	-	-	9,452
Singapore Dollar	49,930	49,128	802	-	-	802
Swedish Krona	6,669,973	6,754,235	(84,262)	-	-	(84,262)
Swiss Franc	8,623,041	8,618,458	4,583	-	-	4,583
Total Derivative Liabilities	<u>\$ 29,221,432</u>	<u>\$ 29,180,541</u>	<u>\$ 40,891</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 40,891</u>

RETIREMENT & SECURITY PROGRAM OF NTCA AND ITS MEMBERS
NOTES TO FINANCIAL STATEMENTS
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NOTE 6 DERIVATIVES AND HEDGING ACTIVITIES (CONTINUED)

At December 31, 2015						
	Amounts Offset in the Consolidated Statement of Financial Condition		Net Amounts Presented in the Consolidated Statement of Financial Condition	Amounts Not Offset in the Consolidated Statement of Financial Condition		
	Gross Amounts			Financial Instruments Collateral	Other Cash Collateral	Net Exposure
Derivative Assets						
Australian Dollar	\$ 5,303,314	\$ 5,316,448	\$ 13,134	\$ -	\$ -	\$ 13,134
Canadian Dollar	619,543	606,259	(13,284)	-	-	(13,284)
Danish Krone	598,821	596,747	(2,074)	-	-	(2,074)
Euro Currency	6,184,666	6,321,639	136,973	-	-	136,973
Hong Kong Dollar	558,812	558,874	62	-	-	62
Israeli Shekel	735,891	732,476	(3,415)	-	-	(3,415)
Japanese Yen	17,199,775	17,551,840	352,065	-	-	352,065
New Zealand Dollar	104,245	109,750	5,505	-	-	5,505
Norwegian Krone	1,105,343	1,081,679	(23,664)	-	-	(23,664)
Pound Sterling	2,663,501	2,634,172	(29,329)	-	-	(29,329)
Singapore Dollar	952,172	945,230	(6,942)	-	-	(6,942)
Swedish Krona	3,462,239	3,558,592	96,353	-	-	96,353
Swiss Franc	2,863,862	2,849,775	(14,087)	-	-	(14,087)
Total Derivative Assets	<u>\$ 42,352,184</u>	<u>\$ 42,863,481</u>	<u>\$ 511,297</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 511,297</u>
Derivative Liabilities						
Australian Dollar	\$ 1,221,052	\$ 1,220,180	\$ 872	\$ -	\$ -	\$ 872
Canadian Dollar	3,253,818	3,160,897	92,921	-	-	92,921
Danish Krone	791,969	793,523	(1,554)	-	-	(1,554)
Euro Currency	3,079,680	3,093,892	(14,212)	-	-	(14,212)
Hong Kong Dollar	234,250	234,316	(66)	-	-	(66)
Japanese Yen	1,248,097	1,256,052	(7,955)	-	-	(7,955)
New Zealand Dollar	2,192,202	2,246,135	(53,933)	-	-	(53,933)
Norwegian Krone	1,416,463	1,396,101	20,362	-	-	20,362
Pound Sterling	13,078,014	12,846,564	231,450	-	-	231,450
Singapore Dollar	88,878	88,615	263	-	-	263
Swedish Krona	2,614,539	2,634,832	(20,293)	-	-	(20,293)
Swiss Franc	7,560,439	7,579,361	(18,922)	-	-	(18,922)
Total Derivative Liabilities	<u>\$ 36,779,401</u>	<u>\$ 36,550,468</u>	<u>\$ 228,933</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 228,933</u>

The following is a summary of the significant accounting policies associated with the Master Trust's use of derivatives:

Forward Foreign Currency Exchange Contracts

Forward foreign currency exchange contracts (forward currency contracts) are commitments to purchase or sell foreign currency at a future settlement date and at a negotiated rate. The Master Trust's holdings in forward foreign exchange contracts also includes foreign exchange spot transactions which are forward foreign exchanges that are conducted in the short term to either convert foreign currency earnings to U.S. dollars or to purchase foreign currencies to satisfy forward activity obligations that are coming due in the near term. The objective is to minimize exchange rate risk. Equity investments in foreign markets have both equity risk and foreign exchange risk.

Forward currency contracts are marked-to-market at the prevailing forward exchange rate of the underlying currencies and the difference between the contract value and the market value is recorded as unrealized appreciation (depreciation) in the Master Trust's net assets. This amount also represents the fair value of the forward currency contracts and is reflected in the Investment in Master Trust on the Statements of Net Assets Available for Benefits.

RETIREMENT & SECURITY PROGRAM OF NTCA AND ITS MEMBERS
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NOTE 6 DERIVATIVES AND HEDGING ACTIVITIES (CONTINUED)

Forward Foreign Currency Exchange Contracts (Continued)

When the forward exchange contract is closed, the Master Trust transfers the unrealized appreciation (depreciation) to a realized gain (loss) equal to the change in value of the forward exchange contract when it was opened and the value at the time it was closed or offset. Sales and purchases of forward currency contracts having the same settlement date and broker are offset and any gain (loss) is realized on the date of offset. The gain (loss) from forward currency contracts are recognized in Master Trust Investment Income on the Statements of Changes in Net Assets Available for Benefits. The amount of gain (loss) recognized on foreign currency contracts is \$2,133,911 and \$(129,173) for the years ended December 31, 2016 and 2015, respectively.

Certain risks may arise entering into forward currency contracts, including the potential inability of counterparties to meet their obligations. Additionally, when utilizing forward currency contracts to hedge, the Master Trust gives up the opportunity to profit from favorable exchange rate movements during the term of the contract.

A summary of open forward currency contracts of the Master Trust at December 31, 2016 is presented below:

		Currency Type Purchased	
	Value Date	Notional Value	Unrealized Appreciation (Depreciation)
Australian Dollar	12/31/2016	\$ 2,198,985	\$ (57,265)
Canadian Dollar	12/31/2016	4,251,087	343
Danish Krone	12/31/2016	186,679	(2,600)
Euro Currency	12/31/2016	2,412,203	18,938
Hong Kong Dollar	12/31/2016	420,850	39
New Israeli Shekel	12/31/2016	715,924	(3,958)
Japanese Yen	12/31/2016	15,031,292	(379,731)
New Zealand Dollar	12/31/2016	2,930,624	(43,473)
Norwegian Krone	12/31/2016	6,359,818	(97,709)
Pound Sterling	12/31/2016	3,007,859	(83,857)
Singapore Dollar	12/31/2016	613,060	(5,991)
Swedish Krona	12/31/2016	177,947	(452)
Swiss Franc	12/31/2016	149,225	(1,602)
		<u>\$ 38,455,553</u>	<u>\$ (657,318)</u>

There were no short-term foreign exchange spot purchases.

RETIREMENT & SECURITY PROGRAM OF NTCA AND ITS MEMBERS
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NOTE 6 DERIVATIVES AND HEDGING ACTIVITIES (CONTINUED)

Forward Foreign Currency Exchange Contracts (Continued)

	Value Date	Currency Type Sold	
		Notional Value	Unrealized Appreciation (Depreciation)
Australian Dollar	12/31/2016	\$ 424,327	\$ (4,438)
Canadian Dollar	12/31/2016	4,925,021	62,037
Danish Krone	12/31/2016	470,186	4,600
Euro Currency	12/31/2016	4,340,696	58,218
Hong Kong Dollar	12/31/2016	174,300	(95)
New Israeli Shekel	12/31/2016	5,207	-
Japanese Yen	12/31/2016	1,808,603	(10,007)
Pound Sterling	12/31/2016	1,610,380	9,452
Singapore Dollar	12/31/2016	49,128	802
Swedish Krona	12/31/2016	6,754,235	(84,261)
Swiss Franc	12/31/2016	8,618,458	4,583
		<u>\$ 29,180,541</u>	<u>\$ 40,891</u>

There were no short-term foreign exchange spot sales.

A summary of the open forward currency contracts of the Master Trust at December 31, 2015 is presented below:

	Value Date	Notional	
		Value	Unrealized Appreciation (Depreciation)
Australian Dollar	12/31/2015	\$ 5,316,448	\$ 13,134
Canadian Dollar	12/31/2015	606,259	(13,284)
Danish Krone	12/31/2015	596,747	(2,074)
Euro Currency	12/31/2015	6,321,639	136,973
Hong Kong Dollar	12/31/2015	558,874	62
Israeli Shekel	12/31/2015	732,476	(3,415)
Japanese Yen	12/31/2015	17,551,840	352,065
New Zealand Dollar	12/31/2015	109,750	5,505
Norwegian Krone	12/31/2015	1,081,679	(23,664)
Pound Sterling	12/31/2015	2,634,172	(29,329)
Singapore Dollar	12/31/2015	945,230	(6,942)
Swedish Krona	12/31/2015	3,558,592	96,353
Swiss Franc	12/31/2015	2,849,775	(14,087)
		<u>\$ 42,863,481</u>	<u>\$ 511,297</u>

There were no short-term foreign exchange spot purchases.

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NOTE 6 DERIVATIVES AND HEDGING ACTIVITIES (CONTINUED)

Forward Foreign Currency Exchange Contracts (Continued)

	Value Date	Currency Type Sold	
		Notional Value	Unrealized Appreciation (Depreciation)
Australian Dollar	12/31/2015	\$ 1,220,180	\$ 872
Canadian Dollar	12/31/2015	3,160,897	92,921
Danish Krone	12/31/2015	793,523	(1,554)
Euro Currency	12/31/2015	3,093,892	(14,212)
Hong Kong Dollar	12/31/2015	234,316	(66)
Japanese Yen	12/31/2015	1,256,052	(7,955)
New Zealand Dollar	12/31/2015	2,246,135	(53,933)
Norwegian Krone	12/31/2015	1,396,101	20,362
Pound Sterling	12/31/2015	12,846,564	231,450
Singapore Dollar	12/31/2015	88,615	263
Swedish Krona	12/31/2015	2,634,832	(20,293)
Swiss Franc	12/31/2015	7,579,361	(18,922)
		<u>\$ 36,550,468</u>	<u>\$ 228,933</u>

There were no short-term foreign exchange spot sales.

Exchange Traded Futures Contracts

An exchange traded futures contract is a contractual agreement to make or take delivery of a standardized financial instrument at a specified future date in accordance with terms specified by a regulated futures exchange.

The Master Trust uses equity index futures contracts on broad indices to manage exposure to international markets. Buying futures tends to increase the Master Trust's exposure to the underlying market. Selling futures tends to decrease the Master Trust's exposure to the underlying market, or hedge the fair value of other markets. The Master Trust does not employ leverage in its use of futures, thus cash balances are maintained at a level at least equal to the contract value of the future.

Futures contracts are valued at the last settlement price at the end of each day on the exchange upon which they are traded. Upon entering into a future contract, the Master Trust is required to deposit either in cash or securities an amount equal to a certain percentage of nominal value of the contract (initial margin). Pursuant to the future contract, the Master Trust agrees to receive from, or pay to, the broker an amount of cash equal to the daily fluctuation in the value of the futures contract. Such receipts or payments are known as "variation margin" which are generally settled daily and are included in the realized gains (losses) on future contracts. The Master Trust records a variation in margin receivable or payable in net assets for variation margins which have not yet been paid at the end of the year. This amount also represents the fair value of the exchange traded futures contracts and is reflected in the Investment in Master Trust on the Statements of Net Assets Available for Benefits.

RETIREMENT & SECURITY PROGRAM OF NTCA AND ITS MEMBERS
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NOTE 6 DERIVATIVES AND HEDGING ACTIVITIES (CONTINUED)

Exchange Traded Futures Contracts (Continued)

Future contracts involve, to varying degrees, credit and market risks. The Master Trust enters into futures contracts on exchanges where the exchange acts as the counterparty to the transaction. Thus, credit risk on such transactions is limited to the failure of the exchange.

The daily settlement on the futures contracts serves to greatly reduce credit risk. Losses in value may arise from changes in the value of the underlying instrument or if there is an illiquid secondary market for the contracts. In addition, there is a risk that there may not be an exact correlation between a future contract and the underlying index or security. The gain (loss) from exchange traded futures contracts are recognized in Master Trust Investment Income on the Statements of Changes in Net Assets Available for Benefits. The amount of gain (loss) recognized on exchange traded futures contracts is \$557,142 and \$472,335 for the years ended December 31, 2016 and 2015, respectively.

At December 31, 2016 and 2015, cash of \$2,612,988 and \$1,388,447 was pledged as collateral for open exchange traded futures contracts, respectively.

A summary of the open futures, included in domestic and international equity securities of the Master Trust, at December 31, 2016 is as follows:

Long Contracts	Number of Contracts Buy (Sell)	Notional Amount	Fair Value Asset (Liability)
FTSE 100 IDX FUT	58	\$ 5,052,571	\$ 117,581
TOPIX INDX FUTR	63	8,199,426	111,140
DAX INDEX FUTURE	24	7,255,625	130,268
CAC40 10 EURO FUT	37	1,897,822	33,662
MSCI SING IX ETS	25	553,402	(2,645)
HANG SEND IDX FUT	35	4,957,146	82,919

Short Contracts	Number of Contracts Buy (Sell)	Notional Amount	Fair Value Asset (Liability)
SPI 200	(94)	\$ (13,232,850)	\$ (164,183)
S+P/TXS 60 IX	(29)	(3,879,065)	(1,177)
AMSTERDAM	(21)	(2,140,109)	(46,794)
IBEX 35 INDX	(16)	(1,571,729)	(13,954)
OMXS30 IND	(127)	(2,123,517)	31,560
US 10YR NOTE	(14)	(1,739,938)	9,046

RETIREMENT & SECURITY PROGRAM OF NTCA AND ITS MEMBERS
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2016 AND 2015

NOTE 6 DERIVATIVES AND HEDGING ACTIVITIES (CONTINUED)

Exchange Traded Futures Contracts (Continued)

A summary of the open futures, included in domestic and international equity securities of the Master Trust, at December 31, 2015 is as follows:

Long Contracts	Number of Contracts Buy (Sell)	Notional Amount	Fair Value Asset (Liability)
CAC40 10 Euro	40	\$ 2,015,521	\$ 5,998
DAX Index	6	1,755,244	33,242
SPI 200	39	3,729,112	246,195
IBEX 35 Index	10	1,034,842	(9,775)
MSCI Singapore Index ETS	38	866,796	2,936
Hang Seng Index	28	3,957,859	(19,880)

Short Contracts	Number of Contracts Buy (Sell)	Notional Amount	Fair Value Asset (Liability)
Topix Index	(6)	\$ (771,853)	\$ (7,612)
OMXS30 Index	(14)	(240,457)	(3,279)
Amsterdam Index	(11)	(1,055,960)	(5,613)
FTSE 100 Index	(20)	(1,827,047)	(66,709)
S&P/TSX 60 IX	(23)	(2,519,718)	(31,887)
FTSE/MIB Index	(7)	(815,236)	(12,473)

NOTE 7 RECONCILIATION OF FINANCIAL STATEMENTS TO FORM 5500

The following is a reconciliation of net assets available for benefits per the financial statements to Form 5500 as of December 31:

	2016	2015
Net Assets Available for Pension Benefits Per the Financial Statements	\$ 2,012,915,544	\$ 1,653,646,482
Net Assets Held in 401(h) Accounts Included as Assets in Form 5500	179,602,088	165,437,551
Net Assets Available for Benefits Per Form 5500	<u>\$ 2,192,517,632</u>	<u>\$ 1,819,084,033</u>

RETIREMENT & SECURITY PROGRAM OF NTCA AND ITS MEMBERS
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2016 AND 2015

NOTE 7 RECONCILIATION OF FINANCIAL STATEMENTS TO FORM 5500 (CONTINUED)

The following is a reconciliation of the changes in net assets available for benefits per the financial statements to the Form 5500 for the year ended December 31, 2016:

	<u>2016</u>
Increase in Net Assets Available for Benefits	
Per the Financial Statements	\$ 359,269,062
Income Earned on 401(h) Account	15,429,787
Contributions Made to 401(h) Account	1,841,495
Expenses Paid by 401(h) Account	(187,991)
Transfers Attributed to 401(h) Account	(2,917,462)
2015 401(h) Prepaid Expenses	(4,449)
Miscellaneous	<u>3,157</u>
Increase in Net Assets Available for Benefits	
Per the Form 5500	<u><u>\$ 373,433,599</u></u>

The net assets of the 401(h) accounts included in Form 5500 are not available to pay pension benefits but can be used only to pay certain non-pension retiree medical benefits; therefore, these assets are excluded from net assets available for pension benefits per the financial statements.

NOTE 8 ACTUARIAL PRESENT VALUE OF ACCUMULATED PROGRAM BENEFITS

The Program's actuary estimates the actuarial present value of accumulated program benefits, which is the amount that results from applying actuarial assumptions to reflect the time value of money (through discounts for interest) and the probability of payment (by means of reductions such as for death, withdrawal or retirement) between the valuation date and the expected date of payment. Benefits to be provided via annuity contracts excluded from plan assets are excluded from accumulated plan benefits.

The accumulated benefit information as of the beginning of the Program year is as follows:

	<u>December 31, 2015</u>
Actuarial Present Value of Accumulated Benefits:	
Vested Benefits of Participants Currently	
Receiving Benefits	\$ 527,868,254
Other Vested Benefits	1,105,884,938
Nonvested Benefits	<u>200,214,850</u>
Total Actuarial Present Value of	
Accumulated Benefits	<u><u>\$ 1,833,968,042</u></u>

RETIREMENT & SECURITY PROGRAM OF NTCA AND ITS MEMBERS
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2016 AND 2015

**NOTE 8 ACTUARIAL PRESENT VALUE OF ACCUMULATED PROGRAM BENEFITS
(CONTINUED)**

The actuarial present value of accumulated Program benefits increased as a result of the following:

Present Value of Accumulated Program Benefits at December 31, 2014	\$ 1,716,730,431
Change During the Year Due to:	
Benefits Accumulated	84,147,569
Actuarial Losses	43,949,114
Decrease in the Discount Period	114,268,461
Actual Benefits Paid	(168,843,098)
Change of Assumptions	43,715,565
Present Value of Accumulated Program Benefits at December 31, 2015	<u><u>\$ 1,833,968,042</u></u>

Changes in actuarial assumptions from December 31, 2014 includes an update to the mortality table to reflect the Society of Actuaries RP-2016 mortality table generationally projected using scale MP-2016.

Significant assumptions underlying the actuarial computations are as follows:

	2015
Interest Rate	7.00%
Mortality Basis	Male and Female Society of Actuaries' RP-2016 Employees mortality table generationally projected with Scale MP-2016 for participants before they begin receiving payment. Male and Female Society of Actuaries' RP-2016 for Healthy Annuitants mortality table generationally projected with Scale MP-2016 for participants currently in payment and once participants not in payment status move to in payment status.
Retirement Age	Variable based on age, using a low of 4% for those 55 to 57 and a high of 100% for those 70 or over, with 5% added in the first year of eligibility for unreduced retirement under the Rule of 85, and 2% for each year thereafter, up to age 65.
Cost Method	Aggregate Cost Method

The foregoing actuarial assumptions are based on the assumption that the Program will continue. Were the Program to terminate, different actuarial assumptions and other factors might be applicable in determining the actuarial present value of accumulated program benefits. The computation of the actuarial present value of accumulated program benefits was made as of January 1, 2016. Had the valuation been performed as of December 31, 2015 there would be no material differences.

RETIREMENT & SECURITY PROGRAM OF NTCA AND ITS MEMBERS
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2016 AND 2015

NOTE 9 FUNDING POLICY

The Program is funded through Employer and participant contributions that are specified by the Employer. These contributions, plus earnings that accumulate tax-free in the Program's unallocated share of the Master Trust, are intended to be sufficient to fund the Program's past and future service cost on an ongoing basis.

NOTE 10 PROGRAM TERMINATION

Although they have not expressed any intention to do so, NTCA and Participating Employers have the right under the Program to discontinue contributions at any time and to terminate their participation in the Program subject to certain advance notice requirements. Also, the NTCA Board of Directors has the authority to terminate the Program.

Should the Program terminate at some future time, a particular participant's accumulated benefits will be paid dependent on the priority of those benefits and the levels of benefits guaranteed by the PBGC at that time. The Program's net assets generally will not be available on a *pro rata* basis to provide participants' benefits, due to the priority assigned different benefit categories under ERISA Section 4044. Some benefits may be fully or partially provided by the then-existing assets and the PBGC guaranty, while other benefits may not be provided at all.

NOTE 11 FEDERAL INCOME TAX STATUS

The Program obtained its latest favorable determination letter from the Internal Revenue Service (IRS) on January 9, 2014. In that letter, the IRS stated that the Program, as designed, was in compliance with the applicable requirements of the Internal Revenue Code. The IRS also indicated, in issuing this letter that the member companies participating in the Program could rely on this letter without having to file individual letters to have the IRS determine if the Program, as they adopted it, is in compliance. While the Program has been further amended since the date of this letter, the Program administrator and the Program's ERISA counsel believe that the Program continues to be designed in compliance with the applicable requirements of the IRC. Therefore, no provision for income taxes has been included in the Program's financial statements.

Accounting principles generally accepted in the United States of America require the Program's management to evaluate tax positions taken by the Program and recognize a tax liability (or asset) if the Program has taken an uncertain position that more likely than not would not be sustained upon examination by the IRS. The Program is subject to routine audits by taxing jurisdictions; however, there are currently no audits for any tax periods in progress.

RETIREMENT & SECURITY PROGRAM OF NTCA AND ITS MEMBERS
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2016 AND 2015

NOTE 12 RELATED PARTY AND PARTY-IN-INTEREST TRANSACTIONS

The Program has entered into an agreement with Services Management Corporation (SMC), a wholly owned subsidiary of NTCA, under which SMC has been designated Contract Administrator for the Program. SMC provides comprehensive third-party administrative services to the Program. SMC is compensated for these services on a fixed-fee basis.

Total fees to SMC under this agreement were \$2,920,032 and \$2,682,168 for the years ended December 31, 2016 and 2015, respectively.

NOTE 13 RISKS AND UNCERTAINTIES

The Program invests in various investment instruments. Investments are exposed to various risks such as interest rate, market and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect the amounts reported in the statements of net assets available for benefits.

Program contributions are made and the actuarial present value of accumulated program benefits are reported based on certain assumptions pertaining to interest rates, inflation rates and employee demographics, all of which are subject to change. Due to uncertainties inherent in the estimations and assumptions process, it is at least reasonably possible that changes in these estimates and assumptions in the near term would be material to the financial statements.

Plan Name	Retirement&Security Program for Employees of the National	EIN:	52-0741336
Plan Sponsor's Name	National Telecommunications Cooperative Associat	PN:	333

[illegible]

SCHEDULE SB (Form 5500) <small>Department of the Treasury Internal Revenue Service</small> <small>Department of Labor Employee Benefits Security Administration</small> <small>Pension Benefit Guaranty Corporation</small>	Single-Employer Defined Benefit Plan Actuarial Information This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code). ► File as an attachment to Form 5500 or 5500-SF.	OMB No. 1210-0110 2016 This Form is Open to Public Inspection
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For calendar plan year 2016 or fiscal plan year beginning 01/01/2016 and ending 12/31/2016

► **Round off amounts to nearest dollar.**

► **Caution:** A penalty of \$1,000 will be assessed for late filing of this report unless reasonable cause is established.

A Name of plan R&S Program for Employees of NTCA and Its Members	B Three-digit plan number (PN) ►	333
C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF NATIONAL TELECOMMUNICATIONS COOPERATIVE ASSOCIATION	D Employer Identification Number (EIN) 52-0741336	
E Type of plan: ☐ Single ☐ Multiple-A ☒ Multiple-B		
F Prior year plan size: ☐ 100 or fewer ☐ 101-500 ☒ More than 500		

Part I Basic Information				
1 Enter the valuation date: Month <u>01</u> Day <u>01</u> Year <u>2016</u>				
2 Assets:				
a Market value	2a			1,796,722,510
b Actuarial value	2b			1,848,666,514
3 Funding target/participant count breakdown	(1) Number of participants	(2) Vested Funding Target	(3) Total Funding Target	
a For retired participants and beneficiaries receiving payment	2,173	552,308,905	552,308,905	
b For terminated vested participants	2,344	51,165,804	51,165,804	
c For active participants	12,516	1,049,267,480	1,250,612,264	
d Total	17,033	1,652,742,189	1,854,086,973	
4 If the plan is in at-risk status, check the box and complete lines (a) and (b) ☐				
a Funding target disregarding prescribed at-risk assumptions			4a	
b Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor			4b	
5 Effective interest rate			5	6.25%
6 Target normal cost			6	94,341,734

Statement by Enrolled Actuary
 To the best of my knowledge, the information supplied in this schedule and accompanying schedules, statements and attachments, if any, is complete and accurate. Each prescribed assumption was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

SIGN HERE	 Signature of actuary	<u>October 6, 2017</u> Date 1706921
Mary E Gibbon Type or print name of actuary TOWERS WATSON DELAWARE INC. Firm name 800 N. GLEBE ROAD ARLINGTON VA 22203 Address of the firm		Most recent enrollment number 703-258-8000 Telephone number (including area code)

If the actuary has not fully reflected any regulation or ruling promulgated under the statute in completing this schedule, check the box and see instructions ☐

For Paperwork Reduction Act Notice, see the Instructions for Form 5500 or 5500-SF.

Schedule SB (Form 5500) 2016
v. 160205

Part II Beginning of Year Carryover and Prefunding Balances

	(a) Carryover balance	(b) Prefunding balance
7 Balance at beginning of prior year after applicable adjustments (line 13 from prior year)		
8 Portion elected for use to offset prior year's funding requirement (line 35 from prior year)		
9 Amount remaining (line 7 minus line 8)		
10 Interest on line 9 using prior year's actual return of _____ %		
11 Prior year's excess contributions to be added to prefunding balance:		
a Present value of excess contributions (line 38a from prior year)		
b(1) Interest on the excess, if any, of line 38a over line 38b from prior year Schedule SB, using prior year's effective interest rate of <u>6.43</u> %		
b(2) Interest on line 38b from prior year Schedule SB, using prior year's actual return		
c Total available at beginning of current plan year to add to prefunding balance		
d Portion of (c) to be added to prefunding balance		
12 Other reductions in balances due to elections or deemed elections		
13 Balance at beginning of current year (line 9 + line 10 + line 11d – line 12)		

Part III Funding Percentages

14 Funding target attainment percentage	14	99.70%
15 Adjusted funding target attainment percentage	15	%
16 Prior year's funding percentage for purposes of determining whether carryover/prefunding balances may be used to reduce current year's funding requirement	16	%
17 If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage.	17	%

Part IV Contributions and Liquidity Shortfalls

(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees	(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees
	205,045,215	12,088,392			
Totals ▶			18(b)	205,045,215	18(c) 12,088,392

19 Discounted employer contributions – see instructions for small plan with a valuation date after the beginning of the year:

a Contributions allocated toward unpaid minimum required contributions from prior years	19a	
b Contributions made to avoid restrictions adjusted to valuation date	19b	
c Contributions allocated toward minimum required contribution for current year adjusted to valuation date	19c	

20 Quarterly contributions and liquidity shortfalls:

a Did the plan have a "funding shortfall" for the prior year?	☐ Yes ☐ No
b If line 20a is "Yes," were required quarterly installments for the current year made in a timely manner?	☐ Yes ☐ No
c If line 20a is "Yes," see instructions and complete the following table as applicable:	

Liquidity shortfall as of end of quarter of this plan year

(1) 1st	(2) 2nd	(3) 3rd	(4) 4th

Part V Assumptions Used to Determine Funding Target and Target Normal Cost

21 Discount rate:			
a Segment rates:	1st segment: 4.43 %	2nd segment: 5.91 %	3rd segment: 6.65 %
			☐ N/A, full yield curve used
b Applicable month (enter code)			21b 4
22 Weighted average retirement age			22 62
23 Mortality table(s) (see instructions) ☐ Prescribed - combined ☒ Prescribed - separate ☐ Substitute			

Part VI Miscellaneous Items

24 Has a change been made in the non-prescribed actuarial assumptions for the current plan year? If "Yes," see instructions regarding required attachment.		☐ Yes ☐ No
25 Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment.		☐ Yes ☐ No
26 Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment.		☐ Yes ☐ No
27 If the plan is subject to alternative funding rules, enter applicable code and see instructions regarding attachment	27	1

Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years

28 Unpaid minimum required contributions for all prior years	28	
29 Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a)	29	
30 Remaining amount of unpaid minimum required contributions (line 28 minus line 29)	30	

Part VIII Minimum Required Contribution For Current Year

31 Target normal cost and excess assets (see instructions):			
a Target normal cost (line 6)		31a	
b Excess assets, if applicable, but not greater than line 31a		31b	
32 Amortization installments:	Outstanding Balance	Installment	
a Net shortfall amortization installment			
b Waiver amortization installment			
33 If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month _____ Day _____ Year _____) and the waived amount		33	
34 Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33)		34	
	Carryover balance	Prefunding balance	Total balance
35 Balances elected for use to offset funding requirement			
36 Additional cash requirement (line 34 minus line 35)		36	
37 Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c)		37	
38 Present value of excess contributions for current year (see instructions)			
a Total (excess, if any, of line 37 over line 36)		38a	
b Portion included in line 38a attributable to use of prefunding and funding standard carryover balances		38b	
39 Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37)		39	
40 Unpaid minimum required contributions for all years		40	

Part IX Pension Funding Relief Under Pension Relief Act of 2010 (See Instructions)

41 If an election was made to use PRA 2010 funding relief for this plan:	
a Schedule elected	☐ 2 plus 7 years ☐ 15 years
b Eligible plan year(s) for which the election in line 41a was made	☐ 2008 ☐ 2009 ☐ 2010 ☐ 2011
42 Amount of acceleration adjustment	42
43 Excess installment acceleration amount to be carried over to future plan years	43

Group #	Group Name	EIN Number	% of Total
41519	Horry Tele Coop., Inc.	57-0337423	4.98%
17537	Rural Tele Service Co., Inc.	48-0538069	2.52%
41518	Farmers Tele Coop., Inc.	53-5335116	2.28%
42508	Golden West Telecommun Coop	46-0237830	1.75%
34531	ATMC	56-0634573	1.71%
41837	SCTG Holdings, LLC	58-2291056	1.60%
37530	Panhandle Tele Coop. Inc.	73-0655435	1.57%
32504	ENMR-Plateau Telecommunications	85-6000923	1.52%
35533	Consolidated Telcom	45-0274821	1.30%
45504	Ubta-Ubet Comm dba Strata Networks	87-0217858	1.21%
24561	Paul Bunyan Rural Tele Co-Op	41-0745441	1.19%
27513	Three Rivers Tele Co-Op, Inc.	81-0243702	1.18%
43544	Twin Lakes Tele Coop. Corp.	62-0517180	1.17%
34513	Skyline Membership Corporation, NC	56-0594332	1.14%
35724	SRT Communications Inc.	45-0418249	1.11%
43547	Ben Lomand Rural Tele Coop, Inc.	62-0532537	1.08%
34535	Star Tele. Memb. Corp.	56-0706976	1.08%
17543	Pioneer Tele Assn., Inc.	48-0568142	1.08%
27516	Triangle Tele Coop. Assn. Inc.	81-6005237	1.02%
34509	Yadkin Valley Tele Memb. Corp.	56-0558967	0.98%
18505	South Central Rural Tele Coop	61-0471202	0.98%
43545	North Central Tele Coop. Inc.	62-0516439	0.97%
27722	Nemont Telephone Coop.	81-0243437	0.92%
44557	Peoples Tele Coop., Inc.	75-0830462	0.91%
27756	Blackfoot Tele Coop. Inc.	81-0251379	0.90%
43581	Black Box Network Services, Inc.	62-1202425	0.89%
27716	Triangle Tele. Coop. Assn. Inc.	81-6005237	0.89%
9503	Services Management Corp.	52-1200541	0.89%
18638	East Kentucky Network, LLC	61-1181339	0.84%
34643	Carolina West Wireless, Inc.	56-1704709	0.83%
41522	Sandhill Tele Coop, Inc.	57-0351757	0.80%
35524	SRT Communications, Inc.	45-0418249	0.75%
9501	NTCA	52-0741336	0.74%
41506	W. Carolina Rural Tele Coop., Inc.	57-0336544	0.74%
32512	Penasco Valley Tele Coop Inc	85-0112816	0.73%
42521	Interstate Telecom. Coop., Inc.	46-0398588	0.72%
26756	Chariton Valley Communications Corp.	43-1942625	0.71%
34521	Wilkes Tele Memb. Corp.	56-0652482	0.69%
35525	Reservation Telephone Cooperative	45-0233514	0.67%
17548	Craw-Kan Tele Coop., Inc.	48-0583719	0.67%
44549	Central Texas Tele Coop. Inc.	75-0853485	0.65%
24737	Consolidated Telephone Co.	41-0721924	0.59%
35528	West River Telecommunications Coop.	45-0236082	0.58%
35522	United Tele Mutual Aid Corp	45-0239389	0.58%
17531	United Tele Assn. Inc.	48-0556219	0.56%
18522	Foothills Rural Tele Co-Op	61-0480100	0.56%

43521	DTC Communications	62-0513986	0.55%
3507	Valley Telephone Coop. Inc.	86-0185485	0.54%
45505	South Central Utah Tele Assn. Inc.	87-0224302	0.53%
42526	Alliance Communications Coop. Inc.	46-0138950	0.52%
14567	Cass Comm Management, Inc.	37-1348713	0.52%
47503	Citizens Tele Coop	54-0169578	0.51%
2520	Arctic Slope Tele. Assn. Coop. Inc.	92-0072774	0.51%
34518	Surry Telephone Memb. Corp.	56-0593120	0.51%
18525	West Kentucky Rural Tele Coop.	61-0471985	0.50%
35526	Northwest Communications Coop	45-0235053	0.50%
18506	Mountain Rur. Tele Coop Corp. Inc.	61-0467317	0.49%
28656	RVW, Inc.	47-0411215	0.48%
15634	Central Indiana Communications, Inc.	35-1566736	0.48%
18530	Duo County Tele Co-Op Corp Inc	61-0529587	0.47%
38506	Pioneer Tele Coop	93-0395815	0.47%
47510	Scott County Tele Coop, Inc.	54-0557573	0.47%
44592	Colorado Valley Tele Coop., Inc.	74-1362636	0.47%
15666	Indiana Fiber Network, LLC	02-0562792	0.46%
17576	Blue Valley Telecommunications, Inc.	48-0663862	0.46%
17583	Tri-County Tele Assn. Inc.	48-0687555	0.46%
27725	Vision Net, Inc.	81-0500059	0.45%
44817	West Central Wireless	75-2168267	0.45%
44575	Hill Country Tele Coop. Inc.	74-1197928	0.44%
44630	Big Bend Telephone Company	74-1386464	0.43%
50574	Chibardun Tele Coop. Inc.	39-0960412	0.43%
24506	Garden Valley Tele. Co.	41-0271520	0.42%
43548	Bledsoe Tele Coop	62-0526657	0.41%
11539	Pineland Telephone Co-Op Inc.	58-0607833	0.41%
17544	KanOkla Telephone Association	48-0600717	0.40%
34529	Randolph Tele Memb Corp	56-0631394	0.40%
17552	Golden Belt Tele Assn., Inc.	48-0590850	0.39%
2509	Copper Valley Tel. Coop. Inc.	92-0031468	0.39%
14518	Adams Tel Co-Op	37-0703673	0.38%
11560	Alma Telephone Company Inc.	58-0159299	0.37%
17580	Wamego Telephone Company Inc.	48-0464870	0.36%
50545	West Wisconsin Telcom Coop Inc.	39-0884116	0.36%
35612	North Dakota Telephone Co.	41-0902524	0.36%
26633	Grand River Mutual Telephone Corp.	44-0549951	0.35%
44530	Poka-Lambro Telephone Coop. Inc.	75-0806646	0.35%
27511	Nemont Tele Coop. Inc.	81-0243437	0.34%
32501	Leaco Rural Tele Coop, Inc.	85-0116343	0.33%
18514	Peoples Rural Telephone Coop.	61-0461840	0.33%
42522	Venture Communications Cooperative	46-0238017	0.33%
35521	Dakota Central Telecom. Coop	45-0237471	0.33%
50596	Tri-County Comm. Coop, Inc.	39-1024048	0.32%
41712	Palmetto Rural Telephone Co-Op. Inc	57-0339353	0.32%
42565	Northern Valley Communications	91-1789911	0.32%

11562	Ringgold Telephone Co. Inc.	58-0699605	0.32%
41512	Palmetto Rural Tele Coop. Inc.	57-0339353	0.31%
35577	Polar Comm Mutual Aid Corp	45-0236904	0.31%
44569	Dell Tele Coop Inc	74-6024749	0.31%
27517	Blackfoot Tele Coop. Inc.	81-0251379	0.31%
44567	XIT Rural Telephone Coop. Inc.	75-0829216	0.30%
26535	Chariton Valley Tele Corp.	43-0692435	0.30%
15522	Perry-Spencer Rural Tele Coop.	35-0921201	0.30%
44517	South Plains Tele Coop. Inc.	75-0835780	0.29%
50513	Chequamegon dba Norvado	39-0834903	0.29%
24537	Consolidated Tele Co	41-0721924	0.28%
28655	Nebraska Central Telephone Company	47-0248410	0.28%
4514	Southwest Arkansas Tele Coop. Inc.	71-0259207	0.28%
11534	Planters Rural Tele Coop, Inc.	58-0604830	0.27%
35712	North Dakota Telephone Company	41-0902524	0.27%
44544	Taylor Tele Coop Inc.	75-0842158	0.25%
24758	ACIRA, LLC	26-3451490	0.25%
44506	Five Area Tele Coop Inc.	75-6111577	0.25%
50531	Vernon Communications Coop.	39-0838123	0.25%
3613	Gila River Telecommunications, Inc.	86-0891615	0.25%
35565	Red River Rural Tele Assoc. Inc.	45-0251341	0.25%
49513	Hardy Telecommunications Inc.	55-0398418	0.25%
24555	Halstad Tele Co	41-0295070	0.24%
44522	Mid-Plains Rural Tele Coop. Inc.	75-0848791	0.24%
13505	Project Mutual Tel Coop Assn	82-0156800	0.24%
32502	Roosevelt County Rural Tel Co (Yucca)	85-6002147	0.24%
41503	Piedmont Rural Telephone Coop, Inc.	57-0328632	0.24%
35728	West River Telecommunications Coop.	45-0236082	0.24%
37536	Total Communications, Inc.	73-0654707	0.24%
42516	James Valley Coop. Tele Co.	46-0233062	0.24%
5517	Siskiyou Telephone	94-0872110	0.24%
24505	Garden Valley Tele Co.	41-0271520	0.24%
35799	Dickey Rural Telephone Coop.	45-0230868	0.23%
11536	Bulloch Telephone Coop Inc	58-0621752	0.22%
15706	NineStar Connect	35-0914373	0.22%
11545	Progressive Rural Tel Co-Op	58-0672930	0.22%
24564	West Central Tele Assn.	41-0722430	0.22%
28524	Northeast Nebraska Telephone Co.	47-0418455	0.22%
15722	Perry-Spencer Rural Telephone Coop.	35-0921201	0.22%
6514	Eastern Slope Rural Tel Assn.	84-0486247	0.22%
24512	Gardenville Coop. Tele Assn.	41-0627190	0.21%
10701	Townes Telecommunications Services	73-1579916	0.21%
14513	McDonough Tele Coop., Inc.	37-0728155	0.20%
16575	South Slope Cooperative Telephone	42-0819332	0.20%
17569	Wilson Telephone Company Inc.	48-0579038	0.20%
29502	Moapa Valley Telephone Co.	88-0037435	0.20%
1524	New Hope Telephone Cooperative	63-0321560	0.20%

15516	Daviess-Martin Rural Tele Corp.	35-0855641	0.20%
26534	Green Hills Tele Corp	44-0571589	0.20%
35527	Polar Comm Mutual Aid Corp	45-0236904	0.19%
4543	Townes Telecommunications Inc.	75-1769042	0.19%
26533	Grand River Mutual Tele Corp	44-0549951	0.19%
4502	Communications Supply Service Assoc	52-1078081	0.19%
35519	Dickey Rural Telephone Coop.	45-0230868	0.19%
16775	South Slope Cooperative Telephone	42-0819332	0.18%
37602	Monte R. Lee & Co. Cons. Engrs.	73-1074412	0.18%
18532	Logan Tele Coop. Inc.	61-0507174	0.18%
42524	Midstate Communications	46-0240510	0.18%
15550	New Paris Tele Inc	35-0545740	0.18%
19514	Campiti-Pleasant Hill Tele Co. Inc.	72-6023032	0.18%
14516	Wabash Tele Coop. Inc.	37-0697499	0.18%
42722	Venture Communications Cooperative	46-0238017	0.18%
3621	San Carlos Apache Telecommunications	86-0851738	0.18%
32555	Baca Valley Telephone Company Inc	86-0285649	0.18%
50502	Nelson Communications Cooperative	39-0790115	0.17%
17549	Rainbow Telecommunications Assn	48-0600104	0.16%
28534	Arapahoe Telephone Company	47-0093540	0.16%
37518	Grand Telephone Company, Inc.	73-0653204	0.16%
16578	Heart Of Iowa Communications Coop.	42-0816897	0.16%
26536	Steelville Tele Exchange, Inc.	43-0680633	0.16%
50507	Marquette-Adams Tele Coop Inc.	39-0827871	0.16%
16616	Breda Telephone Corporation	42-0895882	0.16%
17589	Peoples Telecommunications, LLC	43-1939136	0.16%
23635	Hiawatha Communications, Inc.	38-2730020	0.16%
35725	Reservation Telephone Cooperative	45-0233514	0.16%
16507	Citizens Mutual Tele Cooperative	42-0181770	0.15%
18515	Ballard Rural Tele Coop. Inc.	61-0485742	0.15%
50519	Citizens Tele Coop Inc.	39-0944208	0.15%
44634	Totalcom Communications, LLC	75-0873589	0.15%
14791	Wabash Tele. Coop. Inc.	37-0697499	0.15%
36640	Com Net Inc.	34-1753415	0.14%
23527	Bloomingtondale Telephone Co. Inc.	38-1527914	0.14%
13503	Custer Tele Co-Op Inc	82-0217396	0.14%
50534	Amery Telcom, Inc.	39-0129070	0.13%
15530	SEI Communications	35-0941496	0.13%
50525	Richland-Grant Tele Coop. Inc.	39-0866595	0.13%
44631	Riviera Telephone Company Inc.	74-1530348	0.13%
42517	TrioTel Communications, Inc.	46-0232505	0.13%
44637	Cumby Telephone Cooperative Inc.	75-0220090	0.13%
27515	Northern Tele Coop. Inc.	81-0247750	0.13%
21705	Telcom Insurance Services Corp.	52-1632917	0.13%
33649	Champlain Telephone Company	14-0558680	0.13%
50540	Lakeland Communications	39-0265610	0.12%
14511	Mid Century Tele Coop. Inc.	37-0696003	0.12%

24559	Benton Co-Op Tele Co.	41-0726084	0.12%
15509	Pulaski White Rural Tel Co-Op	35-0934684	0.12%
6518	Plains Cooperative Tel. Assn. Inc.	84-0461506	0.12%
27551	Southern Montana Telephone Co.	81-0107563	0.12%
24558	Albany Mutual Tele Assn	41-0714402	0.12%
42533	CRST Telephone Authority	46-0324093	0.12%
28718	Cambridge Telephone Company	91-1800653	0.12%
13576	Filer Mutual Telephone Company	82-0118625	0.12%
42509	Valley Tele Coop Assoc., Inc.	46-0240919	0.12%
50501	Clear Lake Telephone Company	39-0983114	0.12%
27744	Missouri Valley Communications Inc	33-1015308	0.12%
23531	Hiawatha Telephone Company	38-0858700	0.12%
37558	Canadian Valley Telephone Company	73-0742802	0.12%
38603	Scio Mutual Tele. Assn.	93-0275980	0.12%
15730	SEI Communications	35-0941496	0.12%
28525	Three River Telco	47-0425474	0.11%
6501	Wiggins Tele Assn.	84-0425446	0.11%
47511	Buggs Island Tele Coop Inc.	54-6004683	0.11%
28543	Hemingford Coop Tele Co	47-0187450	0.11%
42908	Kingbrook Rural Water System Inc.	46-0322961	0.11%
42910	Minnehaha Community Water Corp.	46-0318665	0.11%
16520	Farmers Mutual Co-Op Tele Co	42-0246260	0.11%
24605	Minnesota Rural Water Association	41-1283589	0.11%
24540	Runestone Telecom Assoc.	41-0733426	0.11%
44827	Texas Plains Federal	75-0831357	0.11%
4515	Central Arkansas Tel Co-Op Inc	71-0259315	0.10%
37630	Panhandle Telecom. Systems Inc.	73-1182440	0.10%
2619	Cordova Telephone Cooperative Inc.	92-0069166	0.10%
2632	Copper Valley Wireless, LLC	46-2091292	0.10%
18645	Telecom Management Services, Inc.	27-2227371	0.09%
15556	Swayzee Telephone Company, Inc.	35-0698720	0.09%
14816	Comtech Solutions, LLC	37-1373309	0.09%
35721	Dakota Central Telecom. Coop.	45-0237471	0.09%
44845	First National Bank of Tom Bean	75-0616404	0.09%
42520	Santel Communications Coop	46-0236786	0.09%
50523	Farmers Independent Tele. Co.	39-0273283	0.09%
42903	Big Sioux Community Water System	23-7302663	0.08%
11722	Pineland Technology Solutions, LLC	58-1869350	0.08%
38521	Colton Telephone Company	93-0143500	0.08%
50568	La Valle Tele Cooperative	39-0927042	0.08%
15531	Washington County Rural Tel	35-0916880	0.08%
42900	South Dakota Assn Rur Water Sys	46-0340547	0.08%
45628	Direct Comm Cedar Valley LLC	56-2334924	0.08%
36515	Minford Telephone Company	31-4148227	0.08%
15627	Citizens Telephone Corporation	35-0740750	0.08%
44578	Coleman County Tele Coop. Inc.	75-0894391	0.08%
26767	Midwest Data Center, Inc.	06-1667542	0.08%

14517	Egyptian Tel Co-Op Assn	37-0714439	0.08%
26656	New Florence Telephone Company	43-0604005	0.08%
47523	Pembroke Tele Cooperative	54-0855602	0.08%
1519	Mon-Cre Tel. Co-Op, Inc.	63-0332310	0.08%
6608	Pine Drive Telephone Company	84-0582496	0.08%
49523	Spruce Knob Seneca Rocks Tele Inc	23-7398391	0.08%
16743	Van Buren Telephone Company Inc.	42-0576230	0.08%
10511	Northeast Florida Telephone Co	59-0798013	0.07%
43776	Tennessee Telecomm Group	62-1762904	0.07%
6527	Bijou Telephone Cooperative Assn	84-0160080	0.07%
13707	Direct Communications (Star West)	82-0458869	0.07%
37551	Oklatel Communications, Inc.	73-0721379	0.07%
50774	Wisconsin Rural Water Association, Inc.	39-1617442	0.07%
44576	Community Telephone Company Inc.	75-0988430	0.07%
50606	Cochrane Coop Tele Co.	39-0274287	0.07%
16587	Iamo Telephone Co. Inc.	42-0864150	0.07%
33537	Germantown Tel. Company, Inc.	14-1386710	0.07%
2646	Cordova Wireless Communications	91-1821677	0.07%
37555	Oklahoma Western Telephone Co.	73-0724334	0.07%
6530	Farmers Telephone Co.	84-0200825	0.07%
13550	Direct Communications Rockland, Inc.	82-0305544	0.07%
17740	Mutual Telephone Company	48-0312270	0.06%
42720	Santel Communications Cooperative	46-0236786	0.06%
23529	Ontonagon County Telephone Co.	38-0895660	0.06%
42904	Brookings-Deuel Rural Water System	46-0321763	0.06%
26554	Kingdom Tele Co	51-0245855	0.06%
41515	Chesnee Telephone Company Inc.	57-0292840	0.06%
14827	Wabash Independent Networks	37-1348297	0.06%
42916	Tripp County Water Users District	46-0343165	0.06%
34523	Tri-County Tele Memb. Corp.	56-6012128	0.06%
43771	North Central Security Services	62-1804397	0.06%
28555	Henderson Coop. Tele. Company	47-0521692	0.05%
28544	Plainview Telephone Co. Inc.	47-0467236	0.05%
34621	Wilkes Communications, Inc.	56-2006265	0.05%
42914	South Lincoln Rural Water System	46-0338181	0.05%
33549	Champlain Telephone Company	14-0558680	0.05%
27525	Lincoln Telephone Co. Inc.	81-0159660	0.05%
6656	Rye Telephone, Inc.	20-4009422	0.05%
37667	Fred Williamson & Associates, Inc.	73-1221203	0.05%
6606	Nunn Telephone	84-0388880	0.05%
24602	Upsala Coop Tele Assn	41-0236620	0.05%
1549	Castleberry Telephone Company Inc.	63-0037970	0.05%
35515	Inter-Community Tele Company	45-0454396	0.05%
10682	Florida Telecommunication Relay Inc	59-3073646	0.05%
36521	Bascom Mutual Tele Co	34-4183110	0.04%
50600	Bloomer Telephone Company	39-0170960	0.04%
32717	La Jicarita Rural Telephone Coop.	85-0193696	0.04%

32517	La Jicarita Rural Tele Coop.	85-0193696	0.04%
33529	Citizens Tele. Co. Of Hammond Inc.	15-0574629	0.04%
44702	Livingston Telephone Company	74-0749500	0.04%
42605	South Dakota Telecommun Assoc	46-0319642	0.04%
15606	Sweetser Telephone Co. Inc.	35-0699050	0.04%
14808	Egyptian Telephone Co-Op Assn	37-0714439	0.04%
36631	Ridgeville Telephone Co.	34-4339580	0.04%
36527	Farmers Mutual Telephone Co.	34-4230512	0.04%
26754	Kingdom Telephone Co.	51-0245855	0.04%
36513	The Ottoville Mutual Tele. Co.	34-4466080	0.04%
35501	North Dakota Assn Of Rur Tele Coops	45-6022545	0.04%
27750	Missouri Valley Communications, Inc.	33-1015308	0.04%
34601	Holland Poole Holland & Sanderson P A	56-1009466	0.04%
26594	Rock Port Telephone Co	44-0421600	0.04%
38602	St. Paul Coop. Tele. Assoc.	93-0324966	0.04%
42921	T-M Rural Water District	46-0370869	0.04%
44833	Mid-South Telecomm Co. Inc.	63-0957663	0.04%
42909	Lincoln County Rural Water System	46-0314277	0.03%
36632	Sycamore Telephone Company	34-4370610	0.03%
14555	La Harpe Telephone Company	37-0691336	0.03%
16541	Keystone Farmers Co-Op Tele Co	42-0750433	0.03%
33701	New York State Telecomm. Assoc. Inc	14-1467733	0.03%
16563	Cooperative Tele Co.	42-0803307	0.03%
17582	Mo-Kan Dial Company Inc.	48-0674892	0.03%
14705	Woodhull Community Tele. Co. Inc.	36-2218830	0.03%
38619	Eagle Telephone Company, Inc.	93-0794206	0.03%
28551	Hershey Coop Tele Co	47-0382916	0.03%
28653	Nebraska Telecomm Association	47-0250020	0.03%
24620	Emily Cooperative Telephone Co.	41-1245260	0.03%
14522	Hamilton County Tel Co-Op	37-0795454	0.03%
33124	New York Access Billing, LLC	16-1570737	0.03%
16555	Brooklyn Mutual Telecommun Coop.	42-0155100	0.03%
6617	Roggen Telephone Cooperative	84-0434375	0.03%
4545	Rice Belt Telephone Company, Inc.	71-0263323	0.03%
50745	Chippewa Valley Cable, Inc.	39-1130532	0.03%
36503	Arthur Mutual Telephone Co.	34-4178710	0.03%
36601	Kalida Telephone Company	34-4274365	0.03%
9639	Foundation For Rural Service	52-1889647	0.03%
16536	Farmers Telephone Company	42-0247630	0.02%
3601	Alluvion Communications	20-5819142	0.02%
24753	Brandon Communications	41-1765749	0.02%
28548	K & M Telephone Company Inc.	47-0464499	0.02%
50754	Tech Com Inc.	39-1949838	0.02%
1601	Blountsville Telephone Company Inc	63-0326561	0.02%
6602	Peetz Cooperative Telephone Co.	84-0288960	0.02%
16519	Farmers Co-Op Tele Co	42-0654387	0.02%
23551	Midway Telephone Company	38-1585794	0.02%

33510	Crown Point Tele. Corporation	14-1426471	0.02%
13719	Custer Tele Broadband Services, LLC	20-4036802	0.02%
36526	Buckland Telephone Company	34-4197010	0.02%
36602	Fort Jennings Telephone Company	34-4459341	0.02%
26896	Kingdom Telecommunications Inc	43-1663632	0.02%
36625	Glandorf Telephone Co Inc	34-4406494	0.02%
42923	Clark Rural Water Systems, Inc.	46-0345498	0.02%
14699	New Windsor Telephone Company Inc.	36-2418086	0.02%
24683	Emily Coop. Telephone Co.	41-1245260	0.02%
24516	Rothsay Telephone Company	41-0773630	0.01%
46502	Topsham Tele Co Inc.	30-162550	0.01%
41500	SCTBA	57-0662668	0.01%
44897	Circle CC Ranch	71-0357633	0.01%
14622	Hamilton County Tele. Coop., Inc.	37-0795454	0.01%
38675	Eagle Valley Communications	93-1095504	0.01%
36634	The Vaughnsville Telephone Company	34-4382335	0.01%
14787	Illinois Telecommunications Assn.	37-1126810	0.01%
35610	Telecom Training & Safety	45-6042229	0.01%
44562	Valley Tele Coop, Inc.	74-1207591	0.01%
26653	Choctaw Telephone Company	43-1016073	0.00%
16599	Arcadia Tele Co-Op	42-0118520	0.00%
36646	North West Net Inc.	34-1793021	0.00%
51508	Tri-County Telephone Assn., Inc.	83-0178965	0.00%
41729	Hargray Communications Group	57-0812587	0.00%
18534	Coalfields Telephone	61-0513429	0.00%
16602	Central Scott Tele Co	42-0231890	0.00%
18601	Inter-Mountain Cable, Inc.	61-0659636	0.00%
15524	Endeavor Communications	35-0978228	0.00%
51607	Tct West Inc.	83-0308080	0.00%
41529	Hargray Telephone Company Inc.	57-0342960	0.00%
41839	Hargray Wireless L.P.	57-1052162	0.00%
18369	PDNS, LLC	61-1335110	0.00%
18600	Kentucky Telephone Association	61-6031739	0.00%
Total			

Schedule SB, Part V

Summary of Plan Provisions

Effective Date:

As amended through January 1, 2016.

Eligibility Requirements:

Any one of the following, depending upon system election:

- i. Date of employment
- ii. Completion of three months of service
- iii. Completion of six months of service
- iv. Completion of one year of service
- v. Completion of two years of service
- vi. Attainment of age 21
- vii. Attainment of age 21 and completion of three months of service
- viii. Attainment of age 21 and completion of six months of service
- ix. Attainment of age 21 and completion of one year of service
- x. Attainment of age 21 and completion of two years of service.

Retirement Dates:

- a. Normal - The first of the month containing the 65th birthday.
- b. Early - The first of any month coincident with or following the month containing the 55th birthday.

Retirement Benefits:

- a. Normal - The benefit is based on the final average earnings. The benefit is equal to the final average earnings multiplied by the product of:
 - i. .2168 for all earnings prior to January 1, 2008, and .2091 for all earnings on or after January 1, 2008 but prior to January 1, 2014, and 0.1855 for all earnings on or after January 1, 2014, multiplied by
 - ii. The sum of accumulated system and participant net contribution percents.
- b. Early - The benefit amount is the accrued benefit determined as in 4.a. based on past service and salaries at the date of early retirement, subject to the following:
 - i. The full accrued benefit is payable if the employee is eligible to retire under the Rule-of-85. Only employees of systems which have adopted this provision may become eligible.
 - ii. If not, the benefit in 4.a.i. is reduced 1/4% for each month by which the member's 60th birthday, or Early Retirement Date, if later, precedes his Normal Retirement Date, plus 1/2% for each of the next 60 months by which the payment commencement date precedes age 60.
- c. Late - Accrued benefit of 4.a. above, based on credited service and final average earnings at the date of late retirement, increased 1/4% for each month by which the member's Late Retirement Date follows his Normal Retirement Date.

Schedule SB, Part V

Termination Benefits:

The accrued benefit of 4.a. above based on credited service at date of termination. An actuarially equivalent benefit is payable at any time.

Death Benefits:

An amount equal to the greater of:

- i. 100 times the monthly pension that would have been payable had the participant survived until his Normal Retirement Date and retired with benefits payable in the form of a single life annuity with payments guaranteed for ten years.
- ii. The present value of the participant's Accrued Retirement Benefit.

Employee Contributions:

Employees may be required to contribute to the Plan as a condition of participation. The amount of the contribution is equal to a designated percentage of earnings. Interest is credited on all employee contributions.

Form of Benefit Payment:

For married participants, an actuarially equivalent 50% Joint and Survivor Benefit is the normal form of benefit.

For all others, the normal form of benefit is a life annuity with payments guaranteed for ten years.

Optional forms of payment are available under the Plan to all participants.

Changes in Plan Provisions:

There were no changes in plan provisions since the prior valuation.

Schedule SB, Part V

Glossary

<i>Actuarial Accrued Liability</i>	This is computed differently under different actuarial cost methods. Generally, the actuarial accrued liability represents the portion of the cost of the participants' anticipated retirement, termination and/or death and disability benefits allocated to the years before the current plan year.
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<i>Actuarial Gain or Loss</i>	From one plan year to the next, if the experience of the plan differs from that anticipated using the actuarial assumptions, an actuarial gain or loss occurs. For example, an actuarial gain would occur if the assets in the trust earned 12% for the year while the assumed rate of return used in the valuation was 7.75%.
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<i>Current Liability</i>	This is computed the same as the Present Value of Accumulated Benefits, but using interest rate and mortality assumptions specified by the IRS. This quantity is used in the calculation of the plan's funded percentage, to determine whether the plan sponsor will be allowed to make a tax-deductible contribution to the plan for the year, to determine whether quarterly contribution deposits are required, to determine whether the plan is exempt from the deficit reduction contribution and, if not, to determine the amount of the additional funding charge.
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<i>Funding Target</i>	Present value of benefits accrued under the plan as of the beginning of the plan year, determined under ongoing or "not-at-risk" assumptions specified in Internal Revenue Code Section 430.
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<i>Normal Cost</i>	Computed differently under different actuarial cost methods, the normal cost generally represents the portion of the cost of the participants' anticipated retirement, termination, death and disability benefits allocated to the current plan year. Employer Normal Cost also includes the cost of anticipated administrative expenses and is reduced by anticipated employee contributions and so is sometimes called Net Total Employer Normal Cost.
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<i>Present Value of Accumulated Benefits</i>	Computed in accordance with ASC 960, this quantity is determined independently from the plan's actuarial cost method. This is the present value of a participant's accrued benefit as of the valuation date, assuming the participant will earn no more credited service and will receive no future salary.
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<i>Present Value of Future Benefits</i>	This is computed by projecting the total future benefit cash flow from the plan, using actuarial assumptions, and then discounting the cash flow to the valuation date.
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<i>Present Value of Vested Benefits</i>	This is the portion of the Present Value of Accumulated Benefits in which the employee would have a vested interest if the employee were to separate from service with the employer on the valuation date.
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Schedule SB - Statement by Enrolled Actuary

Plan Name: R & S Program for Employees of NTCA and Its Members
EIN / PN: 52-0741336/333
Plan Sponsor: National Telecommunications Cooperative Association

Plan Sponsor National Telecommunications Cooperative Association

EIN / PN 52-0741336/333

Plan Name R & S Program for Employees of NTCA and Its Members

Valuation Date January 1, 2016

Enrolled Actuary Gibbon, Mary E.

Enrollment Number 17-06921

The actuarial assumptions and methods, in combination, represent the enrolled actuary's best estimate of anticipated experience under the plan, subject to the following conditions:

The actuarial valuation, on which the information in this Schedule SB is based, has been prepared in reliance upon the employee and financial data furnished by the plan administrator and the trustee. The enrolled actuary has not made a rigorous check of the accuracy of this information but has accepted it after reviewing it and concluding it is reasonable in relation to similar information furnished in previous years. The amounts of contributions and dates paid shown in Line 3 of Schedule B were listed in reliance on information provided by the plan administrator and/or trustee.

EIN: 52-0741336
PN: 333

**2016 Schedule SB, line 27 –
Actuarial Information for CSEC Plans**

Plan Name: R & S Program for Employees of NTCA and Its Members
EIN / PN: 52-0741336/333
Plan Sponsor: National Telecommunications Cooperative Association

R & S Program for Employees of NTCA and Its Members

**SCHEDULE B
(Form 5500)**

Department of the Treasury
Internal Revenue Service
Department of Labor
Employee Benefits Security
Administration

Pension Benefit Guaranty Corporation

Actuarial Information

This schedule is required to be filed under Section 104 of the Employee Retirement Income Security Act of 1974, referred to as ERISA, except when attached to Form 5500-EZ and, in all cases, under section 6059(a) of the Internal Revenue Code, referred to as the Code.

- Attach to Form 5500 or 5500-EZ if applicable.
► See separate instructions.

Official Use Only

OMB No. 1210-0110

2007

**This Form Is Open to Public
Inspection (except when
attached to Form 5500-EZ).**

For calendar plan year 2007 or fiscal plan year beginning 01/01/2016 and ending 12/31/2016.

► Round off amounts to nearest dollar.

► Caution: A penalty of \$1,000 will be assessed for late filing of this report unless reasonable cause is established.

A Name of plan R&S PROGRAM FOR EMPLOYEES OF NTCA AND ITS MEMBERS	B Three-digit plan number ... ► 333
C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-EZ. NATIONAL TELECOMMUNICATIONS COOPERATIVE ASSN.	D Employer Identification Number 52-0741336
E Type of plan: (1) ☐ Multiemployer (2) ☐ Single-employer (3) ☒ Multiple-employer	F ☐ 100 or fewer participants in prior plan year

Part I Basic Information (To be completed by all plans)

1a Enter the actuarial valuation date: Month 1 Day 1 Year 2, 016	
b Assets:	
(1) Current value of assets	b(1) 1,804,831,164
(2) Actuarial value of assets for funding standard account	b(2) 1,813,026,773
c (1) Accrued liability for plans using immediate gain methods	c(1)
(2) Information for plans using spread gain methods:	
(a) Unfunded liability for methods with bases	c(2)(a)
(b) Accrued liability under entry age normal method	c(2)(b) 2,368,586,422
(c) Normal cost under entry age normal method	c(2)(c) 83,914,387

Statement by Enrolled Actuary (see instructions before signing):

To the best of my knowledge, the information supplied in this schedule and on the accompanying schedules, statements, and attachments, if any, is complete and accurate, and in my opinion each assumption, used in combination, represents my best estimate of anticipated experience under the plan. Furthermore, in the case of a plan other than a multiemployer plan, each assumption used (a) is reasonable (taking into account the experience of the plan and reasonable expectations) or (b) would, in the aggregate, result in a total contribution equivalent to that which would be determined if each such assumption were reasonable; in the case of a multiemployer plan, the assumptions used, in the aggregate, are reasonable (taking into account the experience of the plan and reasonable expectations).

**SIGN
HERE**

Mary E Gibbon
Signature of actuary

October 6, 2017
Date

Mary E Gibbon

Type or print name of actuary

G 1706921

Most recent enrollment number

TOWERS WATSON DELAWARE, INC.

Firm name

(703) 258-8000

Telephone number (including area code)

800 N. GLEBE ROAD, ARLINGTON VA, 22203

Address of the firm

If the actuary has not fully reflected any regulation or ruling promulgated under the statute in completing this schedule,

check the box and see instructions.

For Paperwork Reduction Act Notice and OMB Control Numbers,
see the instructions for Form 5500 or 5500-EZ.

v10.1

Schedule B (Form 5500) 2007



1d Information on current liabilities of the plan:

(1) Amount excluded from current liability attributable to pre-participation service (see instructions) ..	d(1)	0
(2) "RPA '94" information:		
(a) Current liability	d(2)(a)	1,753,840,216
(b) Expected increase in current liability due to benefits accruing during the plan year	d(2)(b)	89,755,108
(c) Current liability computed at highest allowable interest rate (see instructions)	d(2)(c)	1,753,840,216
(d) Expected release from "RPA '94" current liability for the plan year	d(2)(d)	
(3) Expected plan disbursements for the plan year	d(3)	152,140,000

2 Operational information as of beginning of this plan year:

a Current value of the assets (see instructions)		2a	1,804,831,164	
b "RPA '94" current liability:	(1) No. of Persons	(2) Vested Benefits	(3) Total Benefits	
	(1) For retired participants and beneficiaries receiving payments	2173	521,210,601	521,210,601
	(2) For terminated vested participants	2344	48,673,154	48,673,154
	(3) For active participants	12516	994,816,253	1,183,956,461
	(4) Total	17033	1,564,700,008	1,753,840,216
c If the percentage resulting from dividing line 2a by line 2b(4), column (3) is less than 70%, enter such percentage		2c	%	

3 Contributions made to the plan for the plan year by employer(s) and employees:

(a) Month-Day-Year	(b) Amount paid by employer	(c) Amount paid by employees	(a) Month-Day-Year	(b) Amount paid by employer	(c) Amount paid by employees
	205,045,215	12,088,392			
3 Totals ▶ (b)				205,045,215	(c) 12088392.00

4 Quarterly contributions and liquidity shortfall(s):

a Plans other than multiemployer plans, enter funded current liability percentage for preceding year (see instructions)	4a	101.60 %
--	-----------	----------

b If line 4a is less than 100%, see instructions, and complete the following table as applicable:

Liquidity shortfall as of end of Quarter of this plan year			
(1) 1st	(2) 2nd	(3) 3rd	(4) 4th

0 8 0 7 3 5 0 2 0 P



5 Actuarial cost method used as the basis for this plan year's funding standard account computation:

a ☐ Attained age normal **b** ☐ Entry age normal **c** ☐ Accrued benefit (unit credit)

d ☒ Aggregate **e** ☐ Frozen initial liability **f** ☐ Individual level premium

g ☐ Individual aggregate

h ☐ Other (specify) _____

i Has a change been made in funding method for this plan year? ☐ Yes ☒ No

j If line i is "Yes," was the change made pursuant to Revenue Procedure 2000-40? ☐ Yes ☐ No

k If line i is "Yes," and line j is "No" enter the date of the ruling letter (individual or class) approving the change in funding method _____ Month _____ Day _____ Year _____

6 Checklist of certain actuarial assumptions:

a Interest rates for "RPA '94" current liability **6a** 6.65 % ☐ N/A

b Weighted average retirement age **6b** ☐ N/A

c Rates specified in insurance or annuity contracts ☐ N/A **6c** ☐ Yes ☒ No ☐ Yes ☒ No ☐ N/A

d Mortality table code for valuation purposes:

(1) Males **d(1)** A A

(2) Females **d(2)** A A

e Valuation liability interest rate ☐ N/A **6e** 7.00 % 7.00 % ☐ N/A

f Expense loading ☐ N/A **6f** 8.50 % % ☒ N/A

g Annual withdrawal rates:

(1) Age 25 **g(1)** S 16.00 % S 16.00 %

(2) Age 40 **g(2)** S 16.00 % S 16.00 %

(3) Age 55 **g(3)** S 16.00 % S 16.00 %

h Salary scale ☐ N/A **6h** 4.29 % 4.29 % ☐ N/A

i Estimated investment return on actuarial value of assets for year ending on the valuation date **6i** 7.10 %

j Estimated investment return on current value of assets for year ending on the valuation date **6j** 1.10 %

7 New amortization bases established in the current plan year:

(1) Type of Base

(2) Initial Balance

(3) Amortization Charge/Credit

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

8 Miscellaneous information:

a If a waiver of a funding deficiency or an extension of an amortization period has been approved for this plan year, enter the date of the ruling letter granting the approval _____ Month _____ Day _____ Year _____

0 8 0 7 3 5 0 3 0 0



8b If one or more alternative methods or rules (as listed in the instructions) were used for this plan year, enter the appropriate code in accordance with the instructions **▶** _____

c Is the plan required to provide a Schedule of Active Participant Data? (see instructions) If "Yes," attach schedule ☒ Yes ☐ No

9 Funding standard account statement for this plan year:

Charges to funding standard account:

a Prior year funding deficiency, if any	9a	0
b Employer's normal cost for plan year as of valuation date	9b	167,132,514
c Amortization charges as of valuation date:	Outstanding Balance	
(1) All bases except funding waivers	c(1)	0
(2) Funding waivers	c(2)	0
d Interest as applicable on lines 9a, 9b, and 9c	9d	11,699,276
e Additional interest charge due to late quarterly contributions, if applicable	9e	
f Adjusted additional funding charge from Part II, line 12q, if applicable ☐ N/A	9f	0
g Total charges. Add lines 9a through 9f	9g	178,831,790

Credits to funding standard account:

h Prior year credit balance, if any	9h	247,533,166
i Employer contributions. Total from column (b) of line 3	9i	205,045,215
	Outstanding Balance	
j Amortization credits as of valuation date ▶ (\$ _____)	9j	0
k Interest as applicable to end of plan year on lines 9h, 9i, and 9j	9k	17,731,174

l Full funding limitation (FFL) and credits

(1) ERISA FFL (accrued liability FFL)	l(1)	957,867,008
(2) "RPA '94" override (90% current liability FFL)	l(2)	
(3) FFL credit	l(3)	0

m (1) Waived funding deficiency	m(1)	
(2) Other credits	m(2)	

n Total credits. Add lines 9h through 9k, 9l(3), 9m(1), and 9m(2)	9n	470,309,555
--	-----------	-------------

o Credit balance: If line 9n is greater than line 9g, enter the difference	9o	291,477,765
---	-----------	-------------

p Funding deficiency: If line 9g is greater than line 9n, enter the difference	9p	0
---	-----------	---

Reconciliation account:

q Current year's accumulated reconciliation account:

(1) Due to additional funding charges as of the beginning of the plan year	q(1)	
(2) Due to additional interest charges as of the beginning of the plan year	q(2)	
(3) Due to waived funding deficiencies:		
(a) Reconciliation outstanding balance as of valuation date	q(3)(a)	
(b) Reconciliation amount. Line 9c(2) balance minus line 9q(3)(a)	q(3)(b)	0
(4) Total as of valuation date ▶	q(4)	0

10 Contribution necessary to avoid an accumulated funding deficiency. Enter the amount in line 9p or the amount required under the alternative funding standard account if applicable	10	0
--	-----------	---

11 Has a change been made in the actuarial assumptions for the current plan year? If "Yes," see instructions ☒ Yes ☐ No

0 8 0 7 3 5 0 4 0 R



Part II Additional Information for Certain Plans Other Than Multiemployer PlansPlease see **Who Must File** in the Schedule B instructions to determine if you must complete Part II.**12 Additional required funding charge (see instructions):**

- a**
- Enter "Gateway %." Divide line 1b(2) by line 1d(2)(c) and multiply by 100.

If line 12a is at least 90%, go to line 12q and enter -0-.

If line 12a is less than 80%, go to line 12b.

If line 12a is at least 80% (but less than 90%), see instructions and, if applicable, go to line 12q

and enter -0-. Otherwise, go to line 12b

- b**
- "RPA '94" current liability. Enter line 1d(2)(a)

- c**
- Adjusted value of assets (see instructions)

- d**
- Funded current liability percentage. Divide line 12c by 12b and multiply by 100

- e**
- Unfunded current liability. Subtract line 12c from line 12b

- f**
- Liability attributable to any unpredictable contingent event benefit

- g**
- Outstanding balance of unfunded old liability

- h**
- Unfunded new liability. Subtract the total of lines 12f and 12g from line 12e. Enter -0- if negative

- i**
- Unfunded new liability amount (% of line 12h)

- j**
- Unfunded old liability amount

- k**
- Deficit reduction contribution. Add lines 12i, 12j and 1d(2)(b)

- l**
- Net charges in funding standard account used to offset the deficit reduction contribution. Enter a negative number if less than zero

m Unpredictable contingent event amount:

- (1) Benefits paid during year attributable to unpredictable contingent event

- (2) Unfunded current liability percentage. Subtract the percentage on line 12d from 100%

- (3) Enter the product of lines 12m(1) and 12m(2)

- (4) Amortization of all unpredictable contingent event liabilities

- (5) "RPA '94" additional amount (see instructions)

- (6) Enter the greatest of lines 12m(3), 12m(4), or 12m(5)

- n**
- Preliminary additional funding charge: Enter the excess of line 12k over line 12l (if any), plus line 12m(6), adjusted to end of year with interest

- o**
- Contributions needed to increase current liability percentage to 100% (see instructions)

- p**
- Additional funding charge prior to adjustment: Enter the lesser of line 12n or 12o

- q**
- Adjusted additional funding charge: (.0% of line 12p)

12a	103.37 %
12b	
12c	
12d	%
12e	
12f	
12g	
12h	0
12i	0
12j	
12k	0
12l	0
m(1)	
m(2)	%
m(3)	0
m(4)	
m(5)	0
m(6)	0
12n	0
12o	
12p	0
12q	0

0 8 0 7 3 5 0 5 0 S



APPENDIX A - SCHEDULE B ATTACHMENTS (cont.)

Representative termination rates if service greater than or equal to 10 years:

Attained Age	Rate
20	6.6%
25	6.6%
30	3.6%
35	3.8%
40	3.1%
45	2.8%
50	2.6%
55	0.0%
60 and over	0.0%

Disability Rates

None.

Form of Payment

This year:

65% of retirements are assumed to elect a lump sum at termination or retirement. Of the remaining 35%, 30% are assumed to elect a ten-year certain annuity and 70% are assumed to elect a 75% joint and survivor annuity. Vested participants with termination dates in the year prior to the valuation are assumed to elect a lump sum. Terminated vested participants who are eligible for Rule of 85 and will reach 85 points before age 65 are assumed to elect a lump sum in the year they reach 85 points. All other terminated vested participants are assumed to elect a life annuity with payments guaranteed for 10 years commencing at age 65.

Last year:

25% of retirements are assumed to elect a life annuity with payments guaranteed for 10 years; 75% are assumed to elect a lump sum. Terminated vested participants with termination dates in the year prior to the valuation are assumed to elect a lump sum. Terminated vested participants who are eligible for Rule of 85 and will reach 85 points before age 65 are assumed to elect a lump sum in the year they reach 85 points. All other terminated vested participants are assumed to elect a life annuity with payments guaranteed for 10 years commencing at age 65.

Marriage

Of all active participants, 85% are assumed to be married.

Spouse Age

This Year:

Wife 3 years younger than husband.

Last Year:

Wife 4 years younger than husband.

Inclusion Date

The valuation date coincident with or next following the date on which the employee becomes a participant.

APPENDIX A - SCHEDULE B ATTACHMENTS (cont.)

**Representative
Termination Rates not
due to disability,
retirement or mortality**

Representative termination rates if service less than 5 years:

<u>Service</u>	<u>Rate</u>
0	16.0%
1	13.0%
2	10.0%
3	9.0%
4	7.0%

Representative termination rates if service is greater than or equal to 5 years:

<u>Service</u>	<u>Rate</u>
20	6.6%
25	6.6%
30	3.6%
35	3.8%
40	3.1%
45	2.8%
50	2.6%
55	0.0%
60 and over	0.0%

Last Year:

Representative termination rates if service less than 10 years:

<u>Service</u>	<u>Rate</u>
0	12.8%
1	12.0%
2	11.7%
3	9.0%
4	7.4%
5	6.3%
6	5.5%
7	4.8%
8	4.4%
9	3.8%

APPENDIX A - SCHEDULE B ATTACHMENTS (cont.)

Retirement

The following rates of retirement were used:

Retirement Rates for Non-ROE Eligible participants:

<u>Age</u>	<u>Rate</u>
55-59	4.0%
60	7.0%
61	10.0%
62-63	15.0%
64	20.0%
65	40.0%
66-69	25.0%
70	100.0%

Retirement Rates for ROE Eligible participants under age 65 with 85 points:

<u>Age</u>	<u>Rate</u>
55-59	15.0%
60-64	20.0%
65	40.0%
66-69	25.0%
70	100.0%

Retirement Rates for ROE Eligible participants under age 65 without 85 points:

<u>Age</u>	<u>Rate</u>
55-59	2.0%
60-61	7.0%
62-63	15.0%
64	20.0%
65	40.0%
66-69	25.0%
70	100.0%

Last Year:

<u>Age</u>	<u>Rate</u>
55-57	1%
58	1.5%
59	2%
60	8%
61	10%
62	20%
63	10%
64	35%
65	50%
66-69	20%
70	100%

5% is added in the first year of eligibility for unreduced retirement under Rule-of-85, and 2% for each year thereafter, up to age 65.

APPENDIX A - SCHEDULE B ATTACHMENTS (cont.)

Mortality (other than for lump sum distribution)

- For RPA '94 Current Liability: Male and Female 2016 PPA Static Mortality for Non-Annuitants is used for participants in the valuation before they begin receiving payment. Male and Female 2016 PPA Static Mortality for Annuitants is used for participants currently in payment and once participants not in payment status move to in payment status.
- For ASC960: Male and Female Society of Actuaries' RP-2016 Employees mortality table generationally projected with Scale MP-2016 for participants before they begin receiving payment. Male and Female Society of Actuaries' RP-2016 for Healthy Annuitants mortality table generationally projected with Scale MP-2016 for participants currently in payment and once participants not in payment status move to in payment status.
- For all other purposes: Separate rates for disabled participants (based on RP-2015 "Disabled Retiree" table), non-annuitants (based on RP-2015 "Employees" table) and annuitants (based on RP-2015 "Healthy Annuitants" table), all generationally projected using Scale MP-2015.
- Last year for RPA '94 Current Liability: Male and Female 2015 PPA Static Mortality for Non-Annuitants was used for participants in the valuation before they begin receiving payment. Male and Female 2015 PPA Static Mortality for Annuitants was used for participants currently in payment and once participants not in payment status move to in payment status.
- Last Year for ASC960: Male and Female Society of Actuaries' RP-2015 Employees mortality table generationally projected with Scale MP-2015 for participants before they begin receiving payment. Male and Female Society of Actuaries' RP-2015 for Healthy Annuitants mortality table generationally projected with Scale MP-2015 for participants currently in payment and once participants not in payment status move to in payment status.
- Last Year for all other purposes: Separate rates for disabled participants (based on RP-2014 "Disabled Retiree" table), non-annuitants (based on RP-2014 "Employees" table) and annuitants (based on RP-2014 "Healthy Annuitants" table), all generationally projected using Scale MP-2014.

Mortality for lump sum distributions

- For RPA '94 Current Liability: the 2016 mortality table specified in Internal Revenue Code section 417(e). In prior year, the 2015 mortality table specified in Internal Revenue Code section 417(e).
 - For all other purposes: The 2016 mortality table specified in Internal Revenue Code section 417 (e) is used for lump sum distributions in 2016. The Society of Actuaries' RP-2015 mortality table generationally projected with Scale MP-2015 for lump sum distributions after 2016. In the prior year, the 2015 mortality table specified in Internal Revenue Code section 417(e) was used for distributions in 2015 and 2016 and the Society of Actuaries' RP-2014 mortality table generationally projected with Scale MP-2014 for lump sum distributions after 2016.
-

APPENDIX A - SCHEDULE B ATTACHMENTS (cont.)

Administrative Expenses The amount included this year for Administrative Expenses is \$14,142,877. This amount is estimated by assuming last year's expenses, increased by 2.5%, plus actual PBGC premiums for the year.

APPENDIX A - SCHEDULE B ATTACHMENTS

Statement of Actuarial Assumptions and Methods – Schedule B Line 6

Plan Sponsor National Telecommunications Cooperative Association

EIN/PN 52-0741336/333

Interest Rates	Valuation	7.00% (unchanged from 7.00% last year)		
	RPA'94 Current liability	6.65% (changed from 6.81% last year)		
	Lump Sums	Actual 3-segment yield curve for distributions assumed to occur in valuation year and assumed 3-segment yield curve for distributions assumed to occur in future years, based on following schedule:		
	<u>Year</u>	<u>Segment 1</u>	<u>Segment 2</u>	<u>Segment 3</u>
	2016	1.68%	4.05%	4.98%
	2017+	4.00%	5.50%	6.50%
In the prior year, the 1 st , 2 nd and 3 rd segment interest rates for distributions during 2016 and later were 4.25%, 5.75%, and 6.50%, respectively.				

Covered Pay Assumed Plan compensation for the year beginning on the valuation date was determined as the base rate of pay on the valuation date.

Compensation Increases The annual rate of a participant's salary increase was assumed to be based on the participant's age. The following shows the assumed rates of increase at illustrative ages:

<u>Age</u>	<u>Rate</u>
25	7.60%
30	5.90%
35	5.20%
40	4.70%
45	3.80%
50	3.30%
55	3.10%
60	3.00%
65	3.00%

Future Increases in Maximum Benefits, Social Security Wage Base, and Plan Compensation Limitations Projected benefits are limited to the maximum presently allowed under IRC Section 415. Plan compensation is limited to the maximum presently allowed under IRC Section 401(a)(17). No provision is made for future increases in the maximum annual benefit, Social Security Wage Base, or compensation limit.

Assumed Cost-of-Living Adjustments None.

APPENDIX C - SCHEDULE B ATTACHMENTS

Schedule B, Line 3 - Schedule of Plan Year Contributions

<u>Contribution</u> <u>Date</u>	<u>Employer</u> <u>Contribution</u>	<u>Employee</u> <u>Contribution</u>
January 15, 2016	-	2,893,532
February 15, 2016	-	142,868
March 15, 2016	-	611,761
April 15, 2016	-	2,237,308
May 15, 2016	-	87,335
June 15, 2016	-	309,266
July 15, 2016	-	2,596,778
August 15, 2016	-	82,034
September 15, 2016	3,162,946	288,175
October 15, 2016	23,037,798	2,690,690
November 15, 2016	505,175	22,313
December 15, 2016	1,678,083	126,332
January 15, 2017	17,583,701	-
February 15, 2017	11,745,821	-
March 15, 2017	18,936,824	-
April 15, 2017	13,504,292	-
May 15, 2017	12,601,791	-
June 15, 2017	20,914,711	-
July 15, 2017	12,652,256	-
August 15, 2017	29,063,862	-
September 15, 2017	39,657,954	-
Total	205,045,215	12,088,392

Plan Name: R & S Program for Employees of NTCA and Its Members
EIN / PN: 52-0741336/333
Plan Sponsor: National Telecommunications Cooperative Association

APPENDIX B - SCHEDULE B ATTACHMENTS (cont.)

Glossary

<i>Actuarial Accrued Liability</i>	This is computed differently under different actuarial cost methods. Generally, the actuarial accrued liability represents the portion of the cost of the participants' anticipated retirement, termination and/or death and disability benefits allocated to the years before the current plan year.
<i>Actuarial Gain or Loss</i>	From one plan year to the next, if the experience of the plan differs from that anticipated using the actuarial assumptions, an actuarial gain or loss occurs. For example, an actuarial gain would occur if the assets in the trust earned 12% for the year while the assumed rate of return used in the valuation was 7.75%.
<i>Current Liability</i>	This is computed the same as the Present Value of Accumulated Benefits, but using interest rate and mortality assumptions specified by the IRS. This quantity is used in the calculation of the plan's funded percentage, to determine whether the plan sponsor will be allowed to make a tax-deductible contribution to the plan for the year, to determine whether quarterly contribution deposits are required, to determine whether the plan is exempt from the deficit reduction contribution and, if not, to determine the amount of the additional funding charge.
<i>Funding Target</i>	Present value of benefits accrued under the plan as of the beginning of the plan year, determined under ongoing or "not-at-risk" assumptions specified in Internal Revenue Code Section 430.
<i>Normal Cost</i>	Computed differently under different actuarial cost methods, the normal cost generally represents the portion of the cost of the participants' anticipated retirement, termination, death and disability benefits allocated to the current plan year. Employer Normal Cost also includes the cost of anticipated administrative expenses and is reduced by anticipated employee contributions and so is sometimes called Net Total Employer Normal Cost.
<i>Present Value of Accumulated Benefits</i>	Computed in accordance with ASC 960, this quantity is determined independently from the plan's actuarial cost method. This is the present value of a participant's accrued benefit as of the valuation date, assuming the participant will earn no more credited service and will receive no future salary.
<i>Present Value of Future Benefits</i>	This is computed by projecting the total future benefit cash flow from the plan, using actuarial assumptions, and then discounting the cash flow to the valuation date.
<i>Present Value of Vested Benefits</i>	This is the portion of the Present Value of Accumulated Benefits in which the employee would have a vested interest if the employee were to separate from service with the employer on the valuation date.

APPENDIX B - SCHEDULE B ATTACHMENTS (cont.)

Termination Benefits:

The accrued benefit of 4.a. above based on credited service at date of termination. An actuarially equivalent benefit is payable at any time.

Death Benefits:

An amount equal to the greater of:

- i. 100 times the monthly pension that would have been payable had the participant survived until his Normal Retirement Date and retired with benefits payable in the form of a single life annuity with payments guaranteed for ten years.
- ii. The present value of the participant's Accrued Retirement Benefit.

Employee Contributions:

Employees may be required to contribute to the Plan as a condition of participation. The amount of the contribution is equal to a designated percentage of earnings. Interest is credited on all employee contributions.

Form of Benefit Payment:

For married participants, an actuarially equivalent 50% Joint and Survivor Benefit is the normal form of benefit.

For all others, the normal form of benefit is a life annuity with payments guaranteed for ten years.

Optional forms of payment are available under the Plan to all participants.

Changes in Plan Provisions:

There were no changes in plan provisions since the prior valuation.

APPENDIX B - SCHEDULE B ATTACHMENTS (cont.)

Summary of Principal Plan Provisions – Schedule B Lines 6

Effective Date:

As amended through January 1, 2016.

Eligibility Requirements:

Any one of the following, depending upon system election:

- i. Date of employment
- ii. Completion of three months of service
- iii. Completion of six months of service
- iv. Completion of one year of service
- v. Completion of two years of service
- vi. Attainment of age 21
- vii. Attainment of age 21 and completion of three months of service
- viii. Attainment of age 21 and completion of six months of service
- ix. Attainment of age 21 and completion of one year of service
- x. Attainment of age 21 and completion of two years of service.

Retirement Dates:

- a. Normal - The first of the month containing the 65th birthday.
- b. Early - The first of any month coincident with or following the month containing the 55th birthday.

Retirement Benefits:

- a. Normal - The benefit is based on the final average earnings. The benefit is equal to the final average earnings multiplied by the product of:
 - i. .2168 for all earnings prior to January 1, 2008, and .2091 for all earnings on or after January 1, 2008 but prior to January 1, 2014, and 0.1855 for all earnings on or after January 1, 2014, multiplied by
 - ii. The sum of accumulated system and participant net contribution percents.
- b. Early - The benefit amount is the accrued benefit determined as in 4.a. based on past service and salaries at the date of early retirement, subject to the following:
 - i. The full accrued benefit is payable if the employee is eligible to retire under the Rule-of-85. Only employees of systems which have adopted this provision may become eligible.
 - ii. If not, the benefit in 4.a.i. is reduced 1/4% for each month by which the member's 60th birthday, or Early Retirement Date, if later, precedes his Normal Retirement Date, plus 1/2% for each of the next 60 months by which the payment commencement date precedes age 60.
- c. Late - Accrued benefit of 4.a. above, based on credited service and final average earnings at the date of late retirement, increased 1/4% for each month by which the member's Late Retirement Date follows his Normal Retirement Date.

APPENDIX A - SCHEDULE B ATTACHMENTS (cont.)

***Changes in
Assumptions and
Methods Since Last
Actuarial Valuation***

The RPA '94 Current Liability interest rate was changed from 6.81% to 6.65%.

The RPA '94 Current Liability annuitant mortality tables were updated to reflect an additional year of mortality improvements.

The valuation mortality table and lump sum mortality table for distributions after 2016 were updated to reflect the Society of Actuaries' RP-2015 mortality table projected generationally with Scale MP-2015.

The ASC 960 annuitant mortality table and lump sum mortality table for distributions after 2016 were updated to reflect the Society of Actuaries' RP-2014 mortality table projected generationally with Scale MP-2016 from the 2006 base year.

The lump sum interest rate assumption for distributions assumed to occur during 2016 was changed from 4.25%, 5.75% and 6.50% to 1.68%, 4.05% and 4.98% (the actual rates that apply for distributions during 2016), the 1st, 2nd and 3rd segment rates, respectively.

The lump sum interest rate assumption for distributions after 2016 was changed from 4.25%, 5.75% and 6.50% to 4.00%, 5.50% and 6.50%, the 1st, 2nd and 3rd segment rates, respectively.

The lump sum mortality assumption for RPA '94 Current Liability was changed from the 2015 table to the 2016 table, as specified in Internal Revenue Code section 417(e).

The retirement and termination rates, timing and form of payment assumptions and the spousal age difference were all updated as a result of an experience study conducted in 2016.

APPENDIX A - SCHEDULE B ATTACHMENTS (cont.)

Employees

It is assumed that there will be no new or rehired employees.

Employees at Withdrawn Employers

Active employees at withdrawn employers are assumed to terminate, retire and commence benefits at the same rates as active employees at other participating employers.

Cost Method

The Aggregate Cost Method is used to determine the normal cost for retirement, termination, and ancillary benefits. Under this cost method, the total of the present value of all future benefits for all participants reduced by the actuarial value of assets is divided by the present value of future compensation to determine the Normal Cost Rate. The present value of future benefits is determined by discounting, to the valuation date, the total future benefit cash flows from the plan to all of the current participants, using the actuarial assumptions. The actuarial value of assets is adjusted for certain funding standard account balances or by included-but-not-deducted contributions less deducted-but-not-included contributions. The present value of future compensation is determined by discounting, to the valuation date, all of the pensionable compensation anticipated to be paid to the current participants, using the actuarial assumptions. The Normal Cost Rate is then multiplied by the pensionable compensation for participants under retirement age to arrive at the Normal Cost payable on the valuation date. The final Normal Cost, after increasing this result for expected administrative expenses, if applicable, may not be less than zero. For this purpose, "retirement age" means the earliest age at which probability of retirement is 100%.

Asset Method

The actuarial value of assets is equal to the market value of assets except that the difference between total investment return and expected return (based on the valuation interest rate) is recognized at the rate of 20% per year. The resulting value is limited to a range of 80% to 120% of market value.

Participant Data

National Telecommunications Cooperative Association provided employee data as of the valuation date. Data for other participants was provided by National Telecommunications Cooperative Association. We have relied on all the data and information provided, including plan provisions and asset information, as being complete and accurate. We have not independently verified the accuracy or completeness of the data or information provided, but we have performed limited checks for reasonableness. Asset data was provided by the National Telecommunications Cooperative Association.

Tax Policy

The actuarial valuation performed for the plan year ending December 31, 2016 is used to determine the maximum deductible contribution for the tax year ending December 31, 2016.

Benefits Not Included in Valuation

We believe all significant Plan provisions are reflected in this valuation.

APPENDIX C - SCHEDULE B ATTACHMENTS

Schedule B, Line 9h –

Explanation of Prior year Credit Balance/Funding Deficiency Discrepancy

Employer contributions of \$8,183,798 for the 2015 plan year were not originally reported. Below is an updated schedule of contributions:

Plan Year Beginning 1/1/2015:	Updated	Previously Reported
Reported September 15, 2015	1,780,537	1,780,537
Reported October 15, 2015	22,679,926	22,679,926
Reported November 15, 2015	557,770	557,770
Reported December 15, 2015	1,745,155	1,745,155
Reported January 15, 2016	28,412,248	28,354,870
Reported February 15, 2016	1,459,919	1,442,577
Reported March 15, 2016	14,183,405	6,043,041
Reported April 15, 2016	24,847,787	24,830,378
Reported May 15, 2016	1,017,997	1,086,398
Reported June 15, 2016	3,485,578	3,478,470
Reported July 15, 2016	22,414,514	22,403,313
Reported August 15, 2016	11,103,108	11,101,713
Reported September 15, 2016	142,245,552	142,245,552
Total	<u>\$275,933,496</u>	<u>\$267,749,698</u>

Revised Funding Standard Account Development for Prior Year

Line		
9g	Total Charges to funding standard account	167,377,763
9h	Prior year credit balance, if any	129,538,102
9i	Employer Contributions	275,933,496
9k	Interest as applicable to end of plan year on lines 9h and 9i	9,439,331
9n	Total credits. Add lines 9h through 9k	414,910,929
9o	Credit balance. If line 9n is greater than line 9g, enter the difference	247,533,166

APPENDIX C - SCHEDULE B ATTACHMENTS (cont.)

Schedule B, Line 11 – Justification for Change in Actuarial Assumptions as of January 1, 2016

The RPA '94 Current Liability interest rate was changed from 6.81% to 6.65%.

The RPA '94 Current Liability and Funding Target liability annuitant mortality tables were updated to reflect an additional year of mortality improvements.

The PPA segment interest rates were updated from the September 2014 rates of 4.72%, 6.11%, and 6.81% to the September 2015 rates of 4.43%, 5.91% and 6.65%.

The PBGC interest rates were updated from the January 2014 rates of 1.48%, 3.77% and 4.79% to the January 2015 rates of 1.82%, 4.12% and 5.01%

The valuation mortality table and lump sum mortality table for distributions after 2016 were updated to reflect the Society of Actuaries' RP-2015 mortality table projected generationally with Scale MP-2015. The lump sum mortality table for distributions in 2016 was updated to reflect the 2016 table, as specified in Internal Revenue Code 417(e).

The ASC 960 annuitant mortality table and lump sum mortality table for distributions after 2016 were updated to reflect the Society of Actuaries' RP-2014 mortality table projected generationally with Scale MP-2016 from the 2006 base year. The lump sum mortality table for distributions in 2016 was updated to reflect the 2016 table, as specified in Internal Revenue Code section 417(e).

The lump sum interest rate assumption for distributions assumed to occur during 2016 was changed from 4.25%, 5.75% and 6.50% to 1.68%, 4.05% and 4.98% (the actual rates that apply for distributions during 2016), the 1st, 2nd and 3rd segment rates, respectively.

The lump sum interest rate assumption for distributions after 2016 was changed from 4.25%, 5.75% and 6.50% to 4.00%, 5.50% and 6.50%, the 1st, 2nd and 3rd segment rates, respectively.

The lump sum mortality assumption for RPA '94 Current Liability and Funding Target liability was changed from the 2015 table to the 2016 table, as specified in Internal Revenue Code section 417(e).

The retirement and termination rates, timing and form of payment assumptions and the spousal age difference were all updated as a result of an experience study conducted in 2016.

APPENDIX C - SCHEDULE B ATTACHMENTS (cont.)

Line 8c - Schedule of Active Participant Data as of 01/01/2016 Attachment to Schedule B (Form 5500)

Number and Average Plan Compensation Limited by IRC 401(a)(17) Distributed by Attained Age and Attained Years of Credited Service ¹

Attained Age	Attained Years of Credited Service												Total
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over
Under 25	141	81	41	30	7	5		1					306
	\$35,799	\$39,161	\$40,194	\$41,689									\$38,024
25-29	166	123	100	97	80	210	5	2					783
	\$39,800	\$44,551	\$43,610	\$49,857	\$52,678	\$49,985							\$46,476
30-34	125	105	76	90	87	504	261	13					1,261
	\$44,236	\$46,880	\$49,838	\$48,619	\$53,258	\$56,074	\$60,708	\$63,272					\$54,066
35-39	95	83	82	70	67	462	483	303	12				1,657
	\$45,671	\$49,797	\$51,615	\$58,644	\$54,123	\$58,835	\$63,527	\$67,441	\$71,588				\$60,105
40-44	90	63	48	60	46	366	397	609	140				1,819
	\$51,170	\$57,577	\$61,201	\$53,812	\$54,613	\$62,942	\$66,330	\$72,350	\$74,510				\$66,396
45-49	55	50	47	50	31	266	352	517	270	103	5		1,766
	\$54,088	\$55,296	\$62,880	\$58,751	\$68,762	\$64,211	\$62,606	\$69,718	\$84,637	\$81,738			\$68,975
50-54	49	38	38	34	26	238	271	463	275	210	123	23	1,788
	\$52,647	\$62,390	\$60,756	\$72,667	\$80,550	\$64,469	\$64,283	\$68,694	\$74,408	\$84,865	\$85,867	\$89,659	\$71,200
55-59	38	29	25	22	30	197	202	357	215	134	88	105	6
	\$64,297	\$75,157	\$81,625	\$84,296	\$84,532	\$81,208	\$88,510	\$95,994	\$77,711	\$78,646	\$93,803	\$89,787	\$71,876
60-64	23	4	16	18	10	128	111	194	121	60	33	53	806
	\$54,297	\$62,667	\$57,245	\$90,012	\$90,012	\$63,022	\$62,669	\$72,288	\$73,627	\$68,984	\$82,876	\$89,009	\$71,910
65-69	1	4	3	4	5	27	23	38	14	17	4	9	15
						\$63,049	\$76,272	\$73,087	\$85,799	\$75,398			\$91,542
70 & Over						6	3	7	2	1	2	1	22
													\$57,855
Total	783	580	476	475	389	2429	2108	2504	1049	525	253	192	57
	\$45,225	\$50,254	\$53,394	\$55,689	\$60,285	\$59,719	\$63,223	\$69,485	\$77,728	\$80,477	\$87,979	\$89,720	\$107,313

¹ There are 696 withdrawn employees not represented on this distribution, for a total of 12,516 active participants.

Plan Name: R & S Program for Employees of NTCA and Its Members
EIN / PN: 52-0741336/333
Plan Sponsor: National Telecommunications Cooperative Association

R & S Program for Employees of NTCA and Its Members

APPENDIX C - SCHEDULE B ATTACHMENTS

Schedule B, Line 6b – Description of Weighted Average Retirement Age as of January 1, 2016

See Appendix A for retirement rates. The average retirement age for Line 6b was calculated by determining the average age at retirement for those current active participants expected to reach retirement, based on all current decrements assumed.

Plan Name: R & S Program for Employees of NTCA and Its Members
EIN / PN: 52-0741336/333
Plan Sponsor: National Telecommunications Cooperative Association

**Schedule SB, Line 22 –
Description of Weighted Average Retirement Age
as of January 1, 2016**

See Schedule SB, Part V Attachment for retirement rates. The average retirement age for Line 22 was calculated by determining the average age at retirement for those current active participants expected to reach retirement, based on all current decrements assumed.

Plan Name:	R & S Program for Employees of NTCA and Its Members
EIN / PN:	52-0741336/333
Plan Sponsor:	National Telecommunications Cooperative Association

Schedule SB, Part V

Statement of Actuarial Assumptions/Methods

Plan Sponsor National Telecommunications Cooperative Association

EIN/PN 52-0741336/333

Interest Rates	Valuation	7.00% (unchanged from 7.00% last year)		
	RPA'94 Current liability	6.65% (changed from 6.81% last year)		
	PPA Funding Target	<u>Segment 1</u>	<u>Segment 2</u>	<u>Segment 3</u>
	Current Year	4.43%	5.91%	6.65%
	Prior Year	4.72%	6.11%	6.81%
	PBGC Premium Funding Target	<u>Segment 1</u>	<u>Segment 2</u>	<u>Segment 3</u>
	Current Year	1.82%	4.12%	5.01%
	Prior Year	1.48%	3.77%	4.79%
	Lump Sums	Actual 3-segment yield curve for distributions assumed to occur in valuation year and assumed 3-segment yield curve for distributions assumed to occur in future years, based on following schedule:		
	<u>Year</u>	<u>Segment 1</u>	<u>Segment 2</u>	<u>Segment 3</u>
	2016	1.68%	4.05%	4.98%
	2017+	4.00%	5.50%	6.50%

In the prior year, the 1st, 2nd, and 3rd segment interest rates for distributions during 2016 and later were 4.25%, 5.75%, and 6.50%, respectively.

Covered Pay Assumed Plan compensation for the year beginning on the valuation date was determined as the base rate of pay on the valuation date.

Compensation Increases The annual rate of a participant's salary increase was assumed to be based on the participant's age. The following shows the assumed rates of increase at illustrative ages:

<u>Age</u>	<u>Rate</u>
25	7.60%
30	5.90%
35	5.20%
40	4.70%
45	3.80%
50	3.30%
55	3.10%
60	3.00%
65	3.00%

Schedule SB, Part V

***Future Increases in
Maximum Benefits,
Social Security Wage
Base, and Plan
Compensation
Limitations***

Projected benefits are limited to the maximum presently allowed under IRC Section 415. Plan compensation is limited to the maximum presently allowed under IRC Section 401(a)(17). No provision is made for future increases in the maximum annual benefit, Social Security Wage Base, or compensation limit.

***Assumed Cost-of-Living
Adjustments***

None.

Administrative Expenses

The amount included this year for Administrative Expenses is \$14,142,877. This amount is estimated by assuming last year's expenses, increased by 2.5%, plus actual PBGC premiums for the year.

***Mortality (other than for
lump sum distribution)***

For RPA '94 Current Liability and Funding Target: Male and Female 2016 PPA Static Mortality for Non-Annuityants is used for participants in the valuation before they begin receiving payment. Male and Female 2016 PPA Static Mortality for Annuityants is used for participants currently in payment and once participants not in payment status move to in payment status.

For ASC960: Male and Female Society of Actuaries' RP-2016 Employees mortality table generationally projected with Scale MP-2016 for participants before they begin receiving payment. Male and Female Society of Actuaries' RP-2016 for Healthy Annuityants mortality table generationally projected with Scale MP-2016 for participants currently in payment and once participants not in payment status move to in payment status.

For all other purposes: Separate rates for disabled participants (based on RP-2015 "Disabled Retiree" table), non-annuityants (based on RP-2015 "Employees" table) and annuityants (based on RP-2015 "Healthy Annuityants" table), all generationally projected using Scale MP-2015.

Last year for RPA '94 Current Liability and Funding Target: Male and Female 2015 PPA Static Mortality for Non-Annuityants was used for participants in the valuation before they begin receiving payment. Male and Female 2015 PPA Static Mortality for Annuityants was used for participants currently in payment and once participants not in payment status move to in payment status.

Last Year for ASC960: Male and Female Society of Actuaries' RP-2015 Employees mortality table generationally projected with Scale MP-2015 for participants before they begin receiving payment. Male and Female Society of Actuaries' RP-2015 for Healthy Annuityants mortality table generationally projected with Scale MP-2015 for participants currently in payment and once participants not in payment status move to in payment status.

Last Year for all other purposes: Separate rates for disabled participants (based on RP-2014 "Disabled Retiree" table), non-annuityants (based on RP-2014 "Employees" table) and annuityants (based on RP-2014 "Healthy Annuityants" table), all generationally projected using Scale MP-2014.

Schedule SB, Part V

Mortality for lump sum distributions

For RPA '94 Current Liability and Funding Target: the 2016 mortality table specified in Internal Revenue Code section 417(e). In the prior year, the 2015 mortality table specified in Internal Revenue Code section 417(e).

For all other purposes: The 2016 mortality table specified in Internal Revenue Code section 417 (e) is used for lump sum distributions in 2016. The Society of Actuaries' RP-2015 mortality table generationally projected with Scale MP-2015 for lump sum distributions after 2016. In the prior year, the 2015 mortality table specified in Internal Revenue Code section 417(e) was used for distributions in 2015 and 2016 and the Society of Actuaries' RP-2014 mortality table generationally projected with Scale MP-2014 for lump sum distributions after 2016.

Retirement

The following rates of retirement were used:

Retirement Rates for Non-ROE Eligible participants:

<u>Age</u>	<u>Rate</u>
55-59	4.0%
60	7.0%
61	10.0%
62-63	15.0%
64	20.0%
65	40.0%
66-69	25.0%
70	100.0%

Retirement Rates for ROE Eligible participants under age 65 with 85 points:

<u>Age</u>	<u>Rate</u>
55-59	15.0%
60-64	20.0%
65	40.0%
66-69	25.0%
70	100.0%

Retirement Rates for ROE Eligible participants under age 65 without 85 points:

<u>Age</u>	<u>Rate</u>
55-59	2.0%
60-61	7.0%
62-63	15.0%
64	20.0%
65	40.0%
66-69	25.0%
70	100.0%

Schedule SB, Part V

Last Year:

<u>Age</u>	<u>Rate</u>
55-57	1%
58	1.5%
59	2%
60	8%
61	10%
62	20%
63	10%
64	35%
65	50%
66-69	20%
70	100%

5% is added in the first year of eligibility for unreduced retirement under Rule-of-85, and 2% for each year thereafter, up to age 65.

***Representative
Termination Rates
not due to disability,
retirement or mortality***

Representative termination rates if service less than 5 years:

<u>Service</u>	<u>Rate</u>
0	16.0%
1	13.0%
2	10.0%
3	9.0%
4	7.0%

Representative termination rates if service is greater than or equal to 5 years:

<u>Service</u>	<u>Rate</u>
20	6.6%
25	6.6%
30	3.6%
35	3.8%
40	3.1%
45	2.8%
50	2.6%
55	0.0%
60 and over	0.0%

Schedule SB, Part V

Last Year:

Representative termination rates if service less than 10 years:

Service	Rate (Current)
0	12.8%
1	12.0%
2	11.7%
3	9.0%
4	7.4%
5	6.3%
6	5.5%
7	4.8%
8	4.4%
9	3.8%

Representative termination rates if service greater than or equal to 10 years:

Attained Age	Rate
20	6.6%
25	6.6%
30	3.6%
35	3.8%
40	3.1%
45	2.8%
50	2.6%
55	0.0%
60 and over	0.0%

Disability Rates

None.

Schedule SB, Part V

Form of Payment

This year:

65% of retirements are assumed to elect a lump sum at termination or retirement. Of the remaining 35%, 30% are assumed to elect a ten-year certain annuity and 70% are assumed to elect a 75% joint and survivor annuity. Vested participants with termination dates in the year prior to the valuation are assumed to elect a lump sum. Terminated vested participants who are eligible for Rule of 85 and will reach 85 points before age 65 are assumed to elect a lump sum in the year they reach 85 points. All other terminated vested participants are assumed to elect a life annuity with payments guaranteed for 10 years commencing at age 65.

Last year:

25% of retirements are assumed to elect a life annuity with payments guaranteed for 10 years; 75% are assumed to elect a lump sum. Terminated vested participants with termination dates in the year prior to the valuation are assumed to elect a lump sum. Terminated vested participants who are eligible for Rule of 85 and will reach 85 points before age 65 are assumed to elect a lump sum in the year they reach 85 points. All other terminated vested participants are assumed to elect a life annuity with payments guaranteed for 10 years commencing at age 65.

Marriage

Of all active participants, 85% are assumed to be married.

Spouse Age

This Year:

Wife 3 years younger than husband.

Last Year:

Wife 4 years younger than husband.

Inclusion Date

The valuation date coincident with or next following the date on which the employee becomes a participant.

Employees

It is assumed that there will be no new or rehired employees.

Schedule SB, Part V

Employees at Withdrawn Employers

Active employees at withdrawn employers are assumed to terminate, retire and commence benefits at the same rates as active employees at other participating employers.

Cost Method

The Aggregate Cost Method is used to determine the normal cost for retirement, termination, and ancillary benefits. Under this cost method, the total of the present value of all future benefits for all participants reduced by the actuarial value of assets is divided by the present value of future compensation to determine the Normal Cost Rate. The present value of future benefits is determined by discounting, to the valuation date, the total future benefit cash flows from the plan to all of the current participants, using the actuarial assumptions. The actuarial value of assets is adjusted for certain funding standard account balances or by included-but-not-deducted contributions less deducted-but-not-included contributions. The present value of future compensation is determined by discounting, to the valuation date, all of the pensionable compensation anticipated to be paid to the current participants, using the actuarial assumptions. The Normal Cost Rate is then multiplied by the pensionable compensation for participants under retirement age to arrive at the Normal Cost payable on the valuation date. The final Normal Cost, after increasing this result for expected administrative expenses, if applicable, may not be less than zero. For this purpose, "retirement age" means the earliest age at which probability of retirement is 100%.

Asset Method

The actuarial value of assets is equal to the market value of assets except that the difference between total investment return and expected return (based on the valuation interest rate) is recognized at the rate of 20% per year. The resulting value is limited to a range of 80% to 120% of market value.

Participant Data

National Telecommunications Cooperative Association provided employee data as of the valuation date. Data for other participants was provided by National Telecommunications Cooperative Association. We have relied on all the data and information provided, including plan provisions and asset information, as being complete and accurate. We have not independently verified the accuracy or completeness of the data or information provided, but we have performed limited checks for reasonableness. Asset data was provided by the National Telecommunications Cooperative Association.

Tax Policy

The actuarial valuation performed for the plan year ending December 31, 2016 is used to determine the maximum deductible contribution for the tax year ending December 31, 2016.

Benefits Not Included in Valuation

We believe all significant Plan provisions are reflected in this valuation.

Schedule SB, Part V

***Changes in
Assumptions and
Methods Since Last
Actuarial Valuation***

The RPA '94 Current Liability interest rate was changed from 6.81% to 6.65%.

The RPA '94 Current Liability and Funding Target liability annuitant mortality tables were updated to reflect an additional year of mortality improvements.

The PPA segment interest rates were updated from the September 2014 rates of 4.72%, 6.11%, and 6.81% to the September 2015 rates of 4.43%, 5.91% and 6.65%.

The PBGC interest rates were updated from the January 2014 rates of 1.48%, 3.77% and 4.79% to the January 2015 rates of 1.82%, 4.12% and 5.01%

The valuation mortality table and lump sum mortality table for distributions after 2016 were updated to reflect the Society of Actuaries' RP-2015 mortality table projected generationally with Scale MP-2015.

The ASC 960 annuitant mortality table and lump sum mortality table for distributions after 2016 were updated to reflect the Society of Actuaries' RP-2014 mortality table projected generationally with Scale MP-2016 from the 2006 base year.

The lump sum interest rate assumption for distributions assumed to occur during 2016 was changed from 4.25%, 5.75% and 6.50% to 1.68%, 4.05% and 4.98% (the actual rates that apply for distributions during 2016), the 1st, 2nd and 3rd segment rates, respectively.

The lump sum interest rate assumption for distributions after 2016 was changed from 4.25%, 5.75% and 6.50% to 4.00%, 5.50% and 6.50%, the 1st, 2nd and 3rd segment rates, respectively.

The lump sum mortality assumption for RPA '94 Current Liability and Funding Target liability was changed from the 2015 table to the 2016 table, as specified in Internal Revenue Code section 417(e).

The retirement and termination rates, timing and form of payment assumptions and the spousal age difference were all updated as a result of an experience study conducted in 2016.

Attachment to Schedule C Part III

I, as Plan Administrator, verify that the explanation that is reproduced below or attached to this notice is the explanation concerning your termination reported on the Schedule C (Form 5500) attached to the 2016 Form 5500, Annual Return/Report of Employee Benefit Plan for the R & S Program for Employees of NTCA and Its Members. This Form 5500 is identified in line 2b by the nine-digit EIN [52-0741336] and in line 1b by the three-digit PN [333].

You have the opportunity to comment to the Department of Labor concerning any aspect of this explanation. Comments should include the name, EIN and PN of the plan and be submitted to:

Office of Enforcement
Employee Benefits Security Administration
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, D.C. 20210

Plan Administrator

Date

Explanation: Change in the individual assigned as the enrolled actuary.

Plan Name: R & S Program of the National Telecommunications Cooperative Association and its Member Systems

Plan Sponsor: National Telecommunications Cooperative Association

EIN/PN: 52-0741336/333

WillisTowersWatson 

**Schedule SB, Addendum –
Description of Electronic and Hard Copy Discrepancy
as of January 1, 2016**

Schedule SB, Part VIII, line 31a, electronically was submitted with the amount of 94,341,734, but is blank in the signed PDF submitted. The R&S Program of the National Telecommunications Cooperative Association is a CSEC plan and therefore is not required to enter an amount in Part VIII of the Schedule SB, so line item 31a should be blank. The software used to prepare the electronic submission would not allow this item to be removed when submitting.

Plan Name:	R & S Program of the National Telecommunications Cooperative Association and its Member Systems
EIN / PN:	52-0741336/333
Plan Sponsor:	National Telecommunications Cooperative Association