

**August 2020**

***Priest Personnel Projections  
for the Diocese of Jefferson City***



Center for Applied Research in the Apostolate  
Georgetown University  
Washington, D.C.

*Priest Personnel Projections  
for the Diocese of Jefferson City*

August 2020



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## Introduction

In the summer of 2020, the Diocese of Jefferson City commissioned the Center for Applied Research in the Apostolate (CARA) to prepare personnel projections of the current and anticipated diocesan priest personnel of the Diocese. Those projections provide information on:

- the total number of priests,
- the number of priests available for active service,
- the number of not-active priests (i.e., those fully retired and those temporarily not-active),
- the dependency ratio (defined as the number of not-active priests per one priest available for active service),
- the number of priests by age group, and
- the average age of all priests.

This information is provided for each year until 2050 (note that projections after 2029 are less dependable for reasons described in *Part III. Methodology*). **If the personnel situation at the Diocese continues to follow the same patterns as in the last ten years**, then by 2029, there will likely be 73 priests (a decrease of 9 since 2020), including 59 priests available for service (a decrease of 13 since 2020), who are on average 61 years old. See the table below.

Year	Number of Diocesan Priests		Average Age
	Available for Active Service #	Overall #	
2020	72	82	60.7
2021	70	81	60.7
2022	68	80	60.8
2023	65	79	60.9
2024	63	77	61.0
2025	62	76	61.1
2026	62	75	61.2
2027	61	74	61.2
2028	60	74	61.3
2029	59	73	61.4

See projection #16 for more details.

Overall, the report includes 18 different projections, which allow the reader to consider different scenarios based on:

- the number of ordinations,
- the retirement age, and
- whether or not some priests continue to serve after retirement.

To learn how to explore those projections, see the next section titled: *How to Use This Report*.

The accuracy of the projections largely depends on the following values:

- the original number of priests by age,
- the number of priests incardinated in the past ten years,
- the number of priests leaving active ministry in the past ten years,
- the average age at ordination over the past ten years,
- the death probability for men in the United States by age.

The more these values change between the year this report was prepared and the projected year, the less accurate the projections are likely to be. To determine if the projections are out of date, see the beginning of *Part II. Data for Individual Projections*. For more detailed information, see *Part III. Methodology*.



## How to Use This Report

This report describes 18 projections for the Diocese of Jefferson City, for the next 30 years (since 2020). It is divided into three parts:

The first part contains a *Comparison of All Projections*, in a graphical form, displaying the total number of priests, the average age of priests, the number of priests available for active service, the number of not-active priests, and the dependency ratio (defined as the number of not-active priests per one priest available for active service). **Use this first part if you want to consider strategic implications** of how (1) changes to the retirement age, (2) allowing (or not allowing) priests to remain active after retirement, and (3) increasing, maintaining, or decreasing the number of ordinations will affect the overall numbers of priests available for service (and other variables) in the Diocese.

The second part of the report contains *Data for Individual Projections*, which consists of an introduction explaining how to find the most relevant projection at the time of reading this report and the values for each of nine variables, for each of the projected 30 years, for each of the 18 projections. **Use the second part if you want to find out the most applicable projection(s)** at the time of reading this report.

The third part of the report contains information about the *Methodology* underlying these projections. This includes the description of the conceptual framework behind the projections and how this conceptual framework is applied in the forecasting model. The third part also includes the empirical data used to prepare the projections. **Use the third part if you want to understand how the projections were prepared** and the underlying assumptions utilized in creating the projections.

## Part I. Comparison of All Projections

When this report was prepared in August 2020, from data provided by the Diocese, the most likely projection (i.e., the projection assuming the original situation continues) was projection #16:

- The retirement age was high (75 years old).
- Some priests remained active after retirement (assumedly, until 78 years old when all cease being active).
- The number of ordinations was expected to remain at one a year (based on empirical average for the number of ordinations).

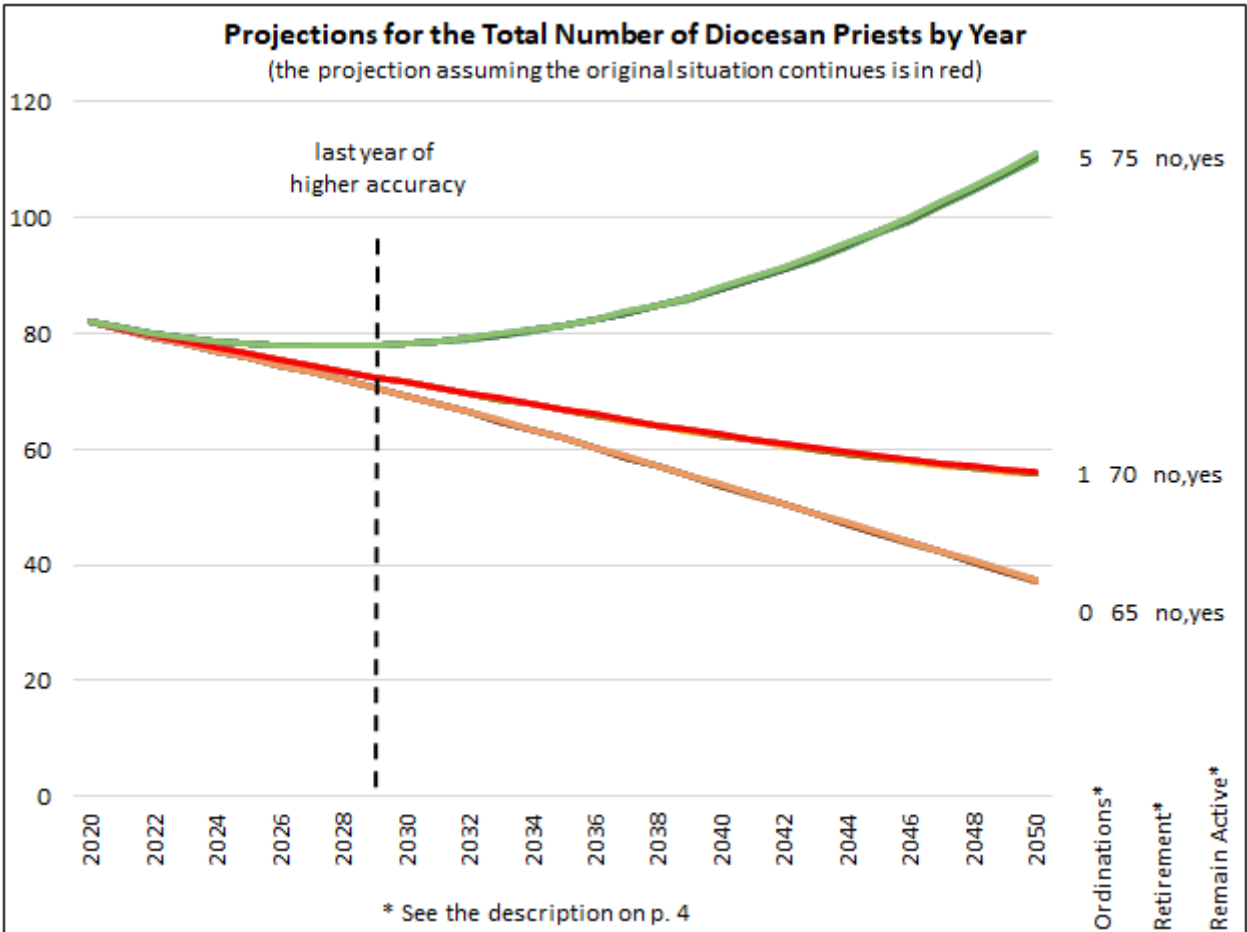
You might be interested to find out how changing each of these three variables above may improve or worsen the personnel situation in the Diocese. For the purpose of this report, the personnel situation is described in terms of:

- the total number of priests,
- the average age of priests,
- the number of priests available for active service,
- the number of not-active priests, and
- the dependency ratio (defined as the number of not-active priests per one priest available for active service).

Each of the five charts on the following pages shows how selecting different values of the three variables (see three bullet points below) affects each of the five projected outcomes (see the five bullet points above), **ceteris paribus (i.e., with all other conditions remaining the same)**.

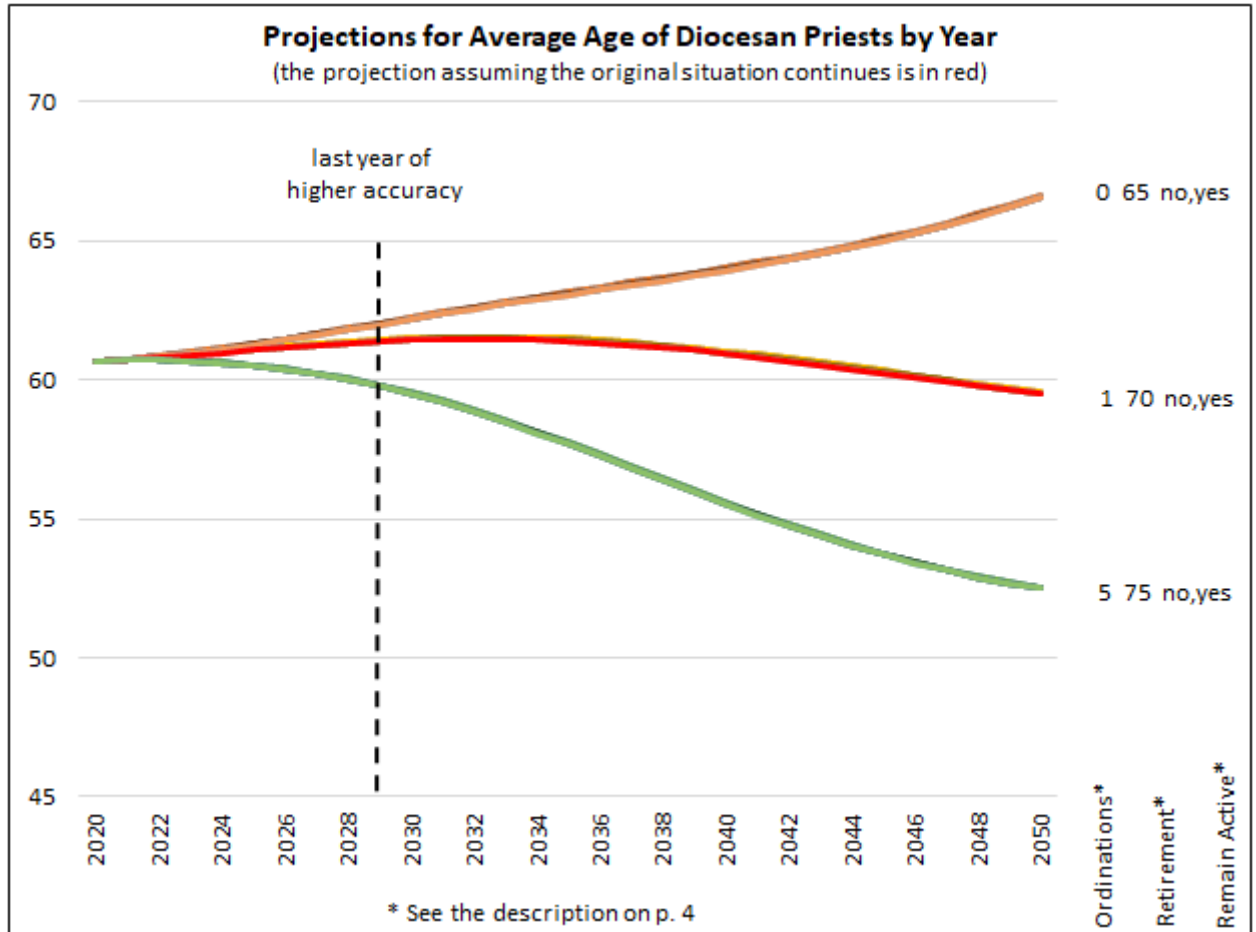
The right-hand side of each chart provides information about the values of those three variables for the most salient projections. This includes:

- **Ordinations**- the number of ordinations projected to take place in the final year of the projection. It can take three values: low (which is below empirically-based average number of ordinations when this report was prepared), medium (which is equal to the average number of ordinations), and high (which is above the average number of ordinations).
- **Retirement**- the retirement age. It can take three values: low (retirement at 65 years old), medium (retirement at 70 years old), and high (retirement at 75 years old).
- **Remain Active**- a reference to the policy about allowing priests to remain active after the retirement age. On the chart, “yes” indicates that some priests remain active after retirement age and “no” indicates that all priests cease to be active upon retirement.



Based on all 18 projections generated for this report, **the total number of priests is projected to be somewhere between 71 and 78 in 2029**. The specific number of all priests depends largely on the number of ordinations:

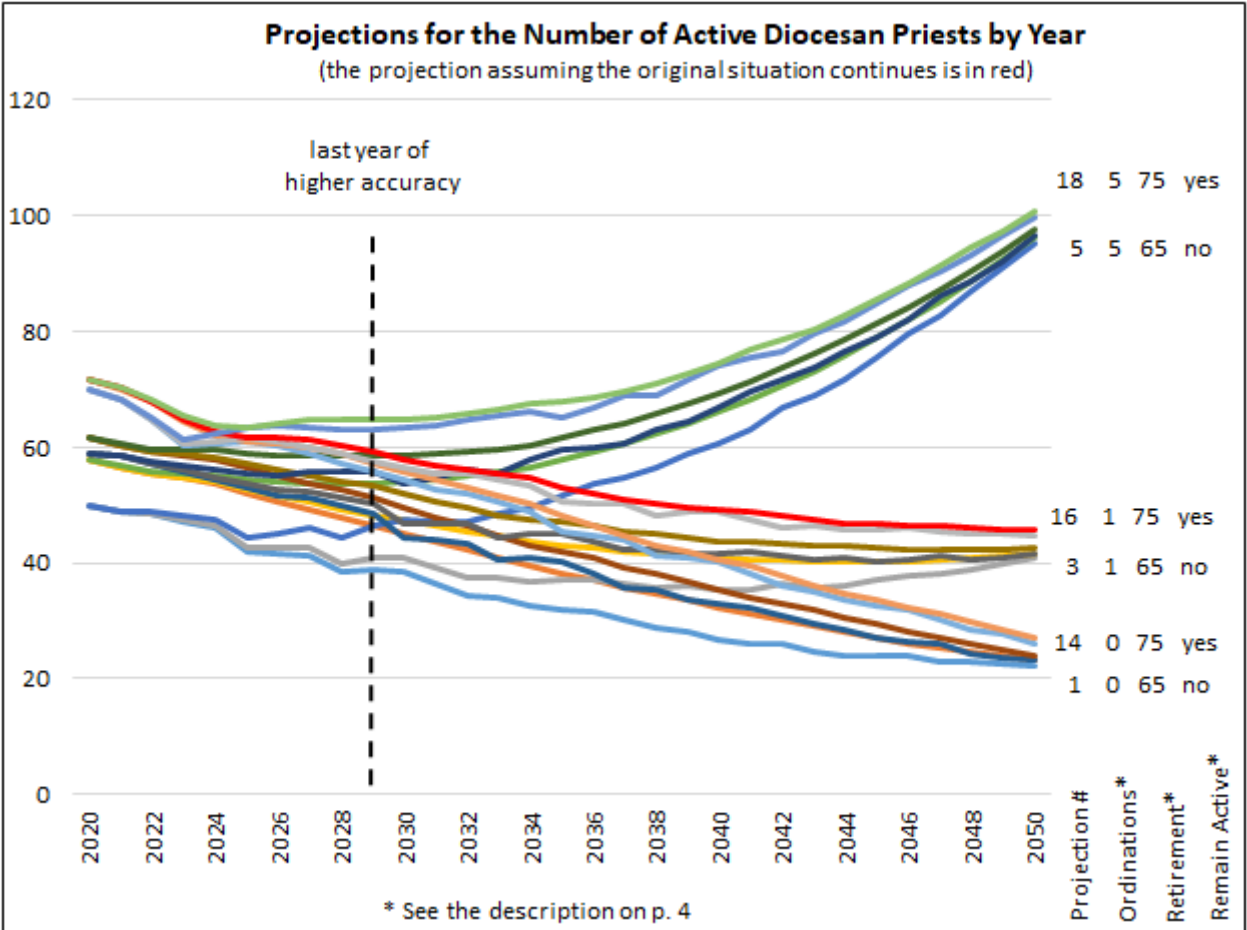
- If the number of ordinations steadily increases from the original average of 1 per year to 5 per year in 2050, then the total number of priests is projected to be 78 in 2029, ceteris paribus.
- If the number of ordinations remains at the average of 1 per year, then the total number of priests is projected to be 73 in 2029, ceteris paribus.
- If the number of ordinations steadily decreases from the original average of 1 per year to 0 per year in 2050, then the total number of priests is projected to be between 71 in 2029, ceteris paribus.



Based on the 18 projections generated for this report, **the average age of all priests is projected to be somewhere between 59.5 and 62.2 in 2029**. Average age of all priests depends largely on the number of ordinations:

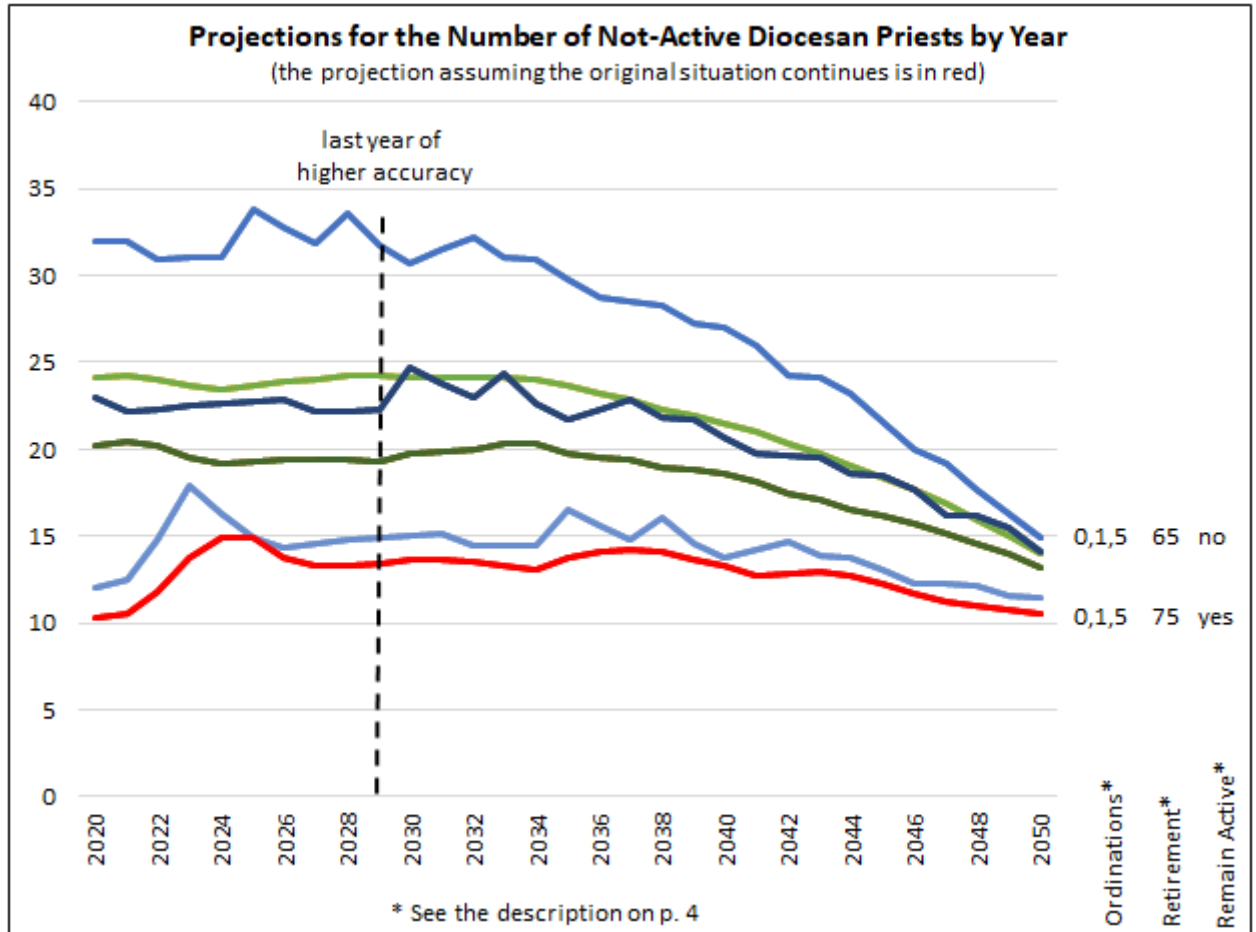
- If the number of ordinations steadily increases from the original average of 1 per year to 5 per year in 2050, then the average age of all priests is projected to be 60 in 2029 and 53 in 2050, ceteris paribus.
- If the number of ordinations remains at the average of 1 per year, then the average age of all priests is projected to be 61 in 2029 and 60 in 2050, ceteris paribus.
- If the number of ordinations steadily decreases from the original average of 1 per year to 0 per year in 2049, then the average age of all priests is projected to be 62 in 2029 and 66 in 2050, ceteris paribus.

The average age of all priests depends to a small extent on the specific age of retirement. The underlying model assumes the possibility that priests can permanently leave priesthood only if they are under the retirement age. Therefore, the higher the retirement age the higher the number of priests who may leave priesthood, and, consequently, the lower the average age of all priests remaining in the Diocese, ceteris paribus. This effect amounts to 0.11% for 2030 and 0.17% for 2050 (i.e., less than 1% difference between projections in regard to the average age is due to different retirement ages in that year).



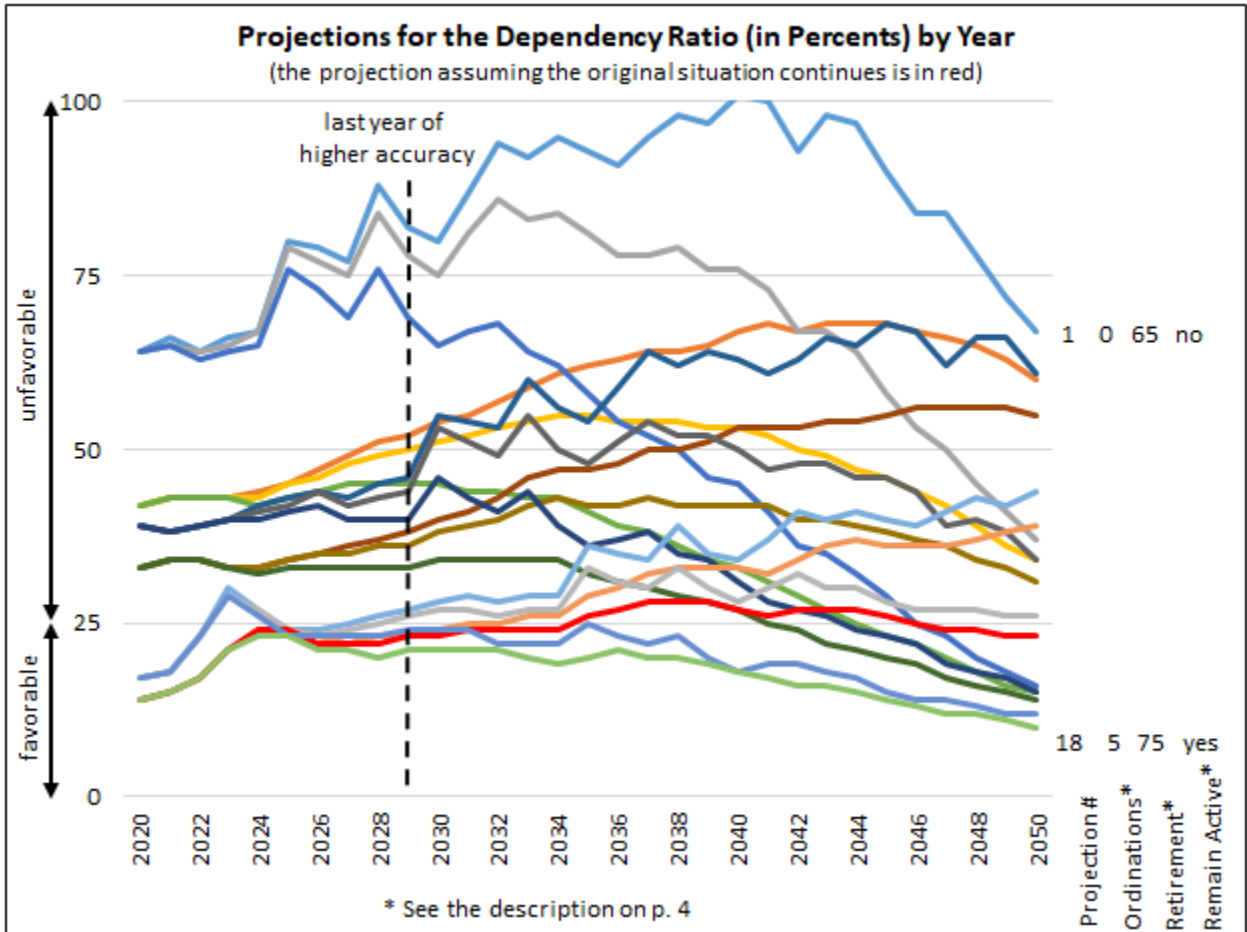
Based on all 18 projections generated for this report, **the number of priests available for active service is projected to be somewhere between 39 and 65 in 2029**. The number of priests available for active service depends largely on the number of ordinations and, to lesser extent, on the age of retirement and on whether priests remain active after retirement:

- If the number of ordinations steadily increases from the original average of 1 per year to 5 per year in 2050, then the number of priests available for active service is projected to be between 46 (if the retirement age is 65 and priests do not remain active after retirement) and 65 (if the retirement age is 75 and priests do remain active after retirement) in 2029, ceteris paribus.
- If the number of ordinations remains at the average of 1 per year, then the number of priests available for active service is projected to be between 41 (if the retirement age is 65 and priests do not remain active after retirement) and 59 (if the retirement age is 75 and priests do remain active after retirement) in 2029, ceteris paribus.
- If the number of ordinations steadily decreases from the original average of 1 per year to 0 per year in 2050, then the number of priests available for active service is projected to be between 39 (if the retirement age is 65 and priests do not remain active after retirement) and 57 (if the retirement age is 75 and priests do remain active after retirement) in 2029, ceteris paribus.



Based on all 18 projections generated for this report, **the number of not-active priests is projected to be somewhere between 13 and 32 in 2029.** This number mostly depends on the retirement age and, to lesser extent, on whether some priests remain active past retirement age, ceteris paribus:

- If the retirement age is 65, then the number of not-active priests is projected to be between 24 (if some priests remain active past retirement) and 32 (if no priests remain active past retirement) in 2029.
- If the retirement age is 70, then the number of not-active priests is projected to be between 19 (if some priests remain active past retirement) and 22 (if no priests remain active past retirement) in 2029.
- If the retirement age is 75, then the number of not-active priests is projected to be between 13 (if some priests remain active past retirement) and 15 (if no priests remain active past retirement) in 2029.



The dependency ratio is the proportion of priests who need to be supported (i.e., those who are not-active) to those who are in service (and thus are, effectively, supporting priests not in service). A dependency ratio much higher than 25% (one not-active priest to four active ones) is considered unfavorable.

Based on all 18 projections generated for this report, **the dependency ratio is projected to be somewhere between 21% and 82% in 2029** (i.e., 5 active priests will need to support between 1 and 4 not-active ones). The dependency ratio is higher (i.e., more unfavorable) if the retirement age is lower, if there are fewer ordinations each year, and if no priests remain active past retirement, ceteris paribus.

According to the most likely projection (projection #16 marked in red on the chart), that is if the original situation continues, the dependency ratio is projected to be 23% in 2029, increase to 28% between 2037 and 2039 and decline back to 23% in 2050.

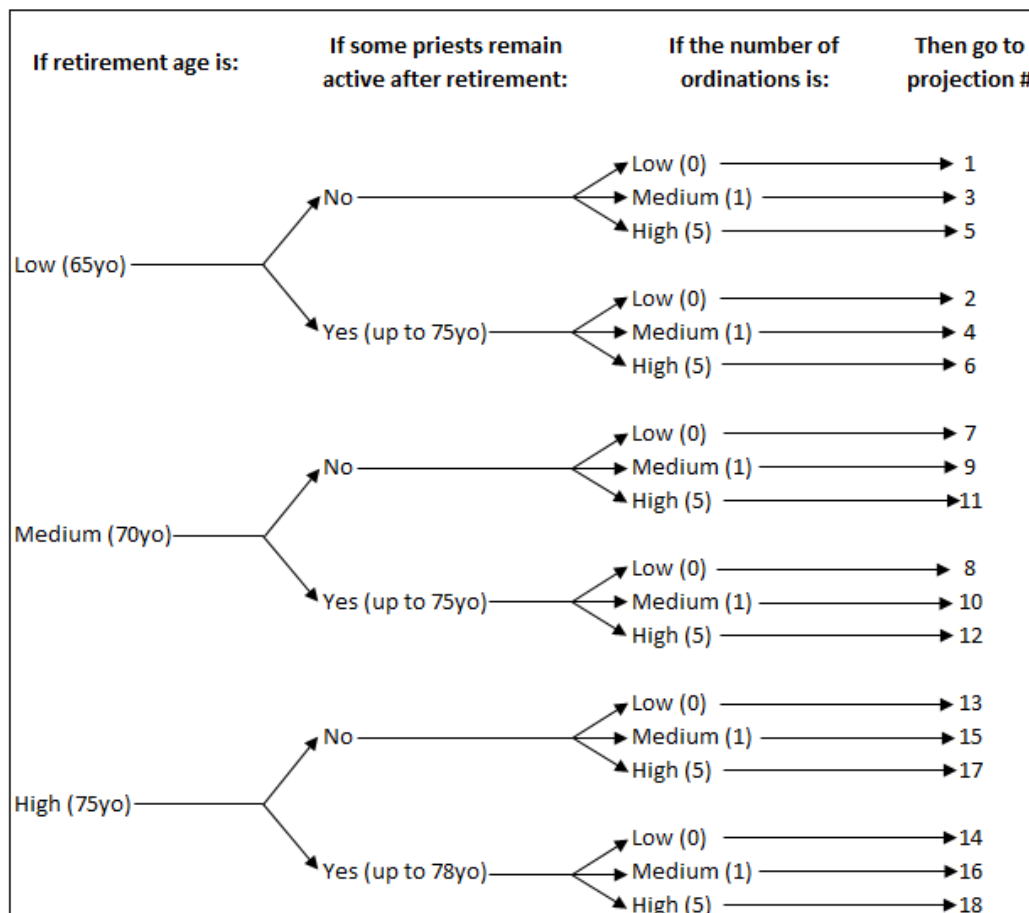
## Part II. Data for Individual Projections

When this report was prepared in August 2020, from data provided by the Diocese of Jefferson City, the most likely projection (i.e., the projection assuming the original situation continues) was projection #16:

- The retirement age was high (75 years old).
- Some priests remained active after retirement (on average, until 78 years old when all cease being active).
- The number of ordinations was expected to remain at one a year (based on empirical average for the number of ordinations).

At the time you are reading this report, the situation might have changed.

- If the three assumptions continue to offer the best fit for the situation in the Diocese, then consult projection #16.
- If the situation changed and the assumptions need to be adjusted, then select the projection most representative of the current situation from the diagram below. This newly selected projection defines one boundary of the projected range while the originally selected projection defines the other boundary.
- If the actual total number of priests in the year when you are reading this report is more than 5% different from the number projected using the method above, then assumptions other than the three listed here are incorrect. In this case, consider contacting CARA to prepare a new set of projections based on the most recent data.





For example, if at the time of preparing this report, the retirement age was medium, some priests remained active after retirement, and the ordinations were expected to remain at the same level, then select projection #10 from the diagram above. Next, if at the time you are reading this report, the retirement age is low, some priests remain active after retirement, and the ordinations are expected to remain at the medium level, then select projection #4 from the diagram above.

Next, find the projected total number of priests (in column *Total*) for the year when you are reading this report in projection #10 and #4. If the actual total number of priests (known to you from another source available at the time when you are reading this report) does not fall between the two numbers plus/minus 5%, then the projections are out of date and you should consider contacting CARA (cara@georgetown.edu) to prepare a new set of projections based on more recent data.

If the actual total number of priests (known to you from another source available at the time when you are reading this report) does fall between the two numbers plus/minus 5%, then proceed to use projections #10 and #4 to determine the projected range of values for the year you are interested in and for the variable you are interested in.

The variables included in the projections are the following:

- **Year** beginning with the base year when the projection was prepared and going 30 years into the future. The year denoted with \* is the last year of higher accuracy of the projection and it is determined by the number of years of historical data the projection is based upon.
- **Available for active service** is the number of priests who are available for active service (e.g., they are not sick or completely retired) in a given year.
- **Not-active** is the number of priests who are not available for service in a given year.
- **Dependency Ratio** is the proportion of those who need to be supported (i.e., not-active: fully retired and dependent), to those who are in service (and thus are, effectively, supporting priests not in service) in a given year. A dependency ratio much higher than 25% (one fully retired or dependent priest to four active ones) is considered unfavorable.
- **Age Groups** show the number of priests in a given year, in each age category. The oldest age category is denoted with (r) to indicate that in a given projection those are priests over the retirement age.
- **Average Age** is the average age of all priests in a given year regardless of their status or age group.
- **Total** is the total number of priests. It is the sum of priests available for active service and not-active priests. Alternatively, it is a sum of priests in all age groups. Any potential differences are due to rounding.

**Projection Number 1**

This projection assumes that the number of ordinands will decrease to 0 (the lowest of three considered amounts) in the final year of the projection (i.e., 2050). The assumed retirement age is at 65 years old (the lowest of three considerations). It is assumed that none of the retired priests will continue to serve.

Year	Available for Active Service #	Not-active #	Dependency Ratio %	Age Groups				Average Age	Total #
				<30 #	30-49 #	50-65 #	>65(r) #		
2020	50	32	64	1	19	30	32	61	82
2021	49	32	66	0	19	30	32	61	81
2022	49	31	64	0	18	30	31	61	79
2023	47	31	66	0	18	29	31	61	78
2024	46	31	67	0	17	29	31	61	77
2025	42	34	80	0	17	25	34	61	76
2026	42	33	79	0	18	23	33	61	75
2027	41	32	77	0	17	24	32	62	73
2028	38	34	88	0	17	21	34	62	72
*2029	39	32	82	0	18	21	32	62	71
2030	39	31	80	0	19	20	31	62	69
2031	36	31	87	0	18	18	31	62	68
2032	34	32	94	0	19	15	32	63	66
2033	34	31	92	0	20	14	31	63	65
2034	33	31	95	0	20	12	31	63	63
2035	32	30	93	0	18	14	30	63	62
2036	32	29	91	0	16	15	29	63	60
2037	30	29	95	0	15	15	29	64	59
2038	29	28	98	0	13	15	28	64	57
2039	28	27	97	0	11	17	27	64	55
2040	27	27	101	0	10	16	27	64	54
2041	26	26	100	0	9	17	26	64	52
2042	26	24	93	0	8	18	24	64	50
2043	25	24	98	0	8	17	24	65	49
2044	24	23	97	0	7	17	23	65	47
2045	24	22	90	0	7	17	22	65	45
2046	24	20	84	0	6	18	20	65	44
2047	23	19	84	0	5	18	19	66	42
2048	23	18	78	0	5	18	18	66	40
2049	23	16	72	0	4	18	16	66	39
2050	22	15	67	0	4	19	15	67	37

\* denotes last year of higher accuracy

**Projection Number 2**

This projection assumes that the number of ordinands will decrease to 0 (the lowest of three considered amounts) in the final year of the projection (i.e., 2050). The assumed retirement age is at 65 years old (the lowest of three considerations). Reduced priestly service will continue for 10 years after retirement age.

Year	Available for Active Service #	Not-active #	Dependency Ratio %	Age Groups				Average Age	Total #
				<30 #	30-49 #	50-65 #	>65(r) #		
2020	58	24	42	1	19	30	32	61	82
2021	57	24	43	0	19	30	32	61	81
2022	55	24	43	0	18	30	31	61	79
2023	55	24	43	0	18	29	31	61	78
2024	54	23	44	0	17	29	31	61	77
2025	52	24	45	0	17	25	34	61	76
2026	51	24	47	0	18	23	33	61	75
2027	49	24	49	0	17	24	32	62	73
2028	48	24	51	0	17	21	34	62	72
*2029	46	24	52	0	18	21	32	62	71
2030	45	24	54	0	19	20	31	62	69
2031	44	24	55	0	18	18	31	62	68
2032	42	24	57	0	19	15	32	63	66
2033	41	24	59	0	20	14	31	63	65
2034	39	24	61	0	20	12	31	63	63
2035	38	24	62	0	18	14	30	63	62
2036	37	23	63	0	16	15	29	63	60
2037	36	23	64	0	15	15	29	64	59
2038	35	22	64	0	13	15	28	64	57
2039	34	22	65	0	11	17	27	64	55
2040	32	22	67	0	10	16	27	64	54
2041	31	21	68	0	9	17	26	64	52
2042	30	20	67	0	8	18	24	64	50
2043	29	20	68	0	8	17	24	65	49
2044	28	19	68	0	7	17	23	65	47
2045	27	18	68	0	7	17	22	65	45
2046	26	18	67	0	6	18	20	65	44
2047	25	17	66	0	5	18	19	66	42
2048	25	16	65	0	5	18	18	66	40
2049	24	15	63	0	4	18	16	66	39
2050	23	14	60	0	4	19	15	67	37

\* denotes last year of higher accuracy

**Projection Number 3**

This projection assumes that the number of ordinands will remain steady at 1 (the middle of three considered amounts) until the last year of the projection (i.e., 2050). The assumed retirement age is at 65 years old (the lowest of three considerations). It is assumed that none of the retired priests will continue to serve.

Year	Available for Active Service #	Not-active #	Dependency Ratio %	Age Groups				Average Age	Total #
				<30 #	30-49 #	50-65 #	>65(r) #		
2020	50	32	64	1	19	30	32	61	82
2021	49	32	65	0	19	30	32	61	81
2022	49	31	64	0	18	30	31	61	80
2023	48	31	65	0	19	29	31	61	79
2024	46	31	67	0	18	29	31	61	77
2025	43	34	79	0	18	25	34	61	76
2026	43	33	77	0	19	23	33	61	75
2027	43	32	75	0	18	24	32	61	74
2028	40	34	84	0	19	21	34	61	73
*2029	41	32	78	0	20	21	32	61	73
2030	41	31	75	0	21	20	31	61	72
2031	39	31	81	0	21	18	31	62	71
2032	37	32	86	0	22	15	32	62	70
2033	38	31	83	0	24	14	31	62	69
2034	37	31	84	0	25	12	31	62	68
2035	37	30	81	0	23	14	30	61	67
2036	37	29	78	0	22	15	29	61	66
2037	36	29	78	0	21	16	29	61	65
2038	36	28	79	0	20	16	28	61	64
2039	36	27	76	0	18	18	27	61	63
2040	35	27	76	0	18	17	27	61	62
2041	36	26	73	0	17	18	26	61	62
2042	36	24	67	0	17	19	24	61	61
2043	36	24	67	0	17	19	24	61	60
2044	36	23	64	0	17	19	23	60	59
2045	37	22	58	0	17	20	22	60	59
2046	38	20	53	0	17	21	20	60	58
2047	38	19	50	0	17	21	19	60	57
2048	39	18	45	0	17	22	18	60	57
2049	40	16	41	0	17	23	16	60	56
2050	41	15	37	0	17	24	15	60	56

\* denotes last year of higher accuracy

**Projection Number 4**

This projection assumes that the number of ordinands will remain steady at 1 (the middle of three considered amounts) until the last year of the projection (i.e., 2050). The assumed retirement age is at 65 years old (the lowest of three considerations). Reduced priestly service will continue for 10 years after retirement age.

Year	Available for Active Service #	Not-active #	Dependency Ratio %	Age Groups				Average Age	Total #
				<30 #	30-49 #	50-65 #	>65(r) #		
2020	58	24	42	1	19	30	32	61	82
2021	57	24	43	0	19	30	32	61	81
2022	56	24	43	0	18	30	31	61	80
2023	55	24	43	0	19	29	31	61	79
2024	54	23	43	0	18	29	31	61	77
2025	53	24	45	0	18	25	34	61	76
2026	52	24	46	0	19	23	33	61	75
2027	50	24	48	0	18	24	32	61	74
2028	49	24	49	0	19	21	34	61	73
*2029	48	24	50	0	20	21	32	61	73
2030	47	24	51	0	21	20	31	61	72
2031	46	24	52	0	21	18	31	62	71
2032	45	24	53	0	22	15	32	62	70
2033	45	24	54	0	24	14	31	62	69
2034	44	24	55	0	25	12	31	62	68
2035	43	24	55	0	23	14	30	61	67
2036	43	23	54	0	22	15	29	61	66
2037	42	23	54	0	21	16	29	61	65
2038	42	22	54	0	20	16	28	61	64
2039	41	22	53	0	18	18	27	61	63
2040	41	22	53	0	18	17	27	61	62
2041	41	21	52	0	17	18	26	61	62
2042	40	20	50	0	17	19	24	61	61
2043	40	20	49	0	17	19	24	61	60
2044	40	19	47	0	17	19	23	60	59
2045	40	18	46	0	17	20	22	60	59
2046	40	18	44	0	17	21	20	60	58
2047	40	17	42	0	17	21	19	60	57
2048	41	16	39	0	17	22	18	60	57
2049	41	15	36	0	17	23	16	60	56
2050	42	14	34	0	17	24	15	60	56

\* denotes last year of higher accuracy

**Projection Number 5**

This projection assumes that the number of ordinands will increase to 5 (the highest of three considered amounts) in the final year of the projection (i.e., 2050). The assumed retirement age is at 65 years old (the lowest of three considerations). It is assumed that none of the retired priests will continue to serve.

Year	Available for Active Service #	Not-active #	Dependency Ratio %	Age Groups				Average Age	Total #
				<30 #	30-49 #	50-65 #	>65(r) #		
2020	50	32	64	1	19	30	32	61	82
2021	49	32	65	0	19	30	32	61	81
2022	49	31	63	0	19	30	31	61	80
2023	48	31	64	0	19	29	31	61	79
2024	48	31	65	0	19	29	31	61	79
2025	44	34	76	0	20	25	34	61	78
2026	45	33	73	0	22	23	33	60	78
2027	46	32	69	0	22	24	32	60	78
2028	44	34	76	0	23	21	34	60	78
*2029	46	32	69	0	25	21	32	60	78
2030	48	31	65	0	28	20	31	60	78
2031	47	31	67	0	29	18	31	59	79
2032	47	32	68	0	32	15	32	59	79
2033	49	31	64	0	35	14	31	59	80
2034	50	31	62	0	37	12	31	58	81
2035	52	30	58	0	37	14	30	58	81
2036	54	29	54	0	38	16	29	57	82
2037	55	29	52	0	39	16	29	57	83
2038	56	28	50	0	39	17	28	56	85
2039	59	27	46	0	39	20	27	56	86
2040	61	27	45	0	41	20	27	56	88
2041	63	26	41	0	42	22	26	55	89
2042	67	24	36	0	43	23	24	55	91
2043	69	24	35	0	45	24	24	54	93
2044	72	23	32	0	47	25	23	54	95
2045	76	22	29	0	48	27	22	54	97
2046	80	20	25	0	50	29	20	53	100
2047	83	19	23	0	52	31	19	53	102
2048	87	18	20	0	53	33	18	53	105
2049	91	16	18	0	55	36	16	53	107
2050	95	15	16	0	57	39	15	53	110

\* denotes last year of higher accuracy

**Projection Number 6**

This projection assumes that the number of ordinands will increase to 5 (the highest of three considered amounts) in the final year of the projection (i.e., 2050). The assumed retirement age is at 65 years old (the lowest of three considerations). Reduced priestly service will continue for 10 years after retirement age.

Year	Available for Active Service #	Not-active #	Dependency Ratio %	Age Groups				Average Age	Total #
				<30 #	30-49 #	50-65 #	>65(r) #		
2020	58	24	42	1	19	30	32	61	82
2021	57	24	43	0	19	30	32	61	81
2022	56	24	43	0	19	30	31	61	80
2023	56	24	43	0	19	29	31	61	79
2024	55	23	42	0	19	29	31	61	79
2025	55	24	43	0	20	25	34	61	78
2026	54	24	44	0	22	23	33	60	78
2027	54	24	45	0	22	24	32	60	78
2028	54	24	45	0	23	21	34	60	78
*2029	54	24	45	0	25	21	32	60	78
2030	54	24	45	0	28	20	31	60	78
2031	55	24	44	0	29	18	31	59	79
2032	55	24	44	0	32	15	32	59	79
2033	56	24	43	0	35	14	31	59	80
2034	56	24	43	0	37	12	31	58	81
2035	58	24	41	0	37	14	30	58	81
2036	59	23	39	0	38	16	29	57	82
2037	61	23	38	0	39	16	29	57	83
2038	62	22	36	0	39	17	28	56	85
2039	64	22	34	0	39	20	27	56	86
2040	66	22	33	0	41	20	27	56	88
2041	68	21	31	0	42	22	26	55	89
2042	71	20	29	0	43	23	24	55	91
2043	73	20	27	0	45	24	24	54	93
2044	76	19	25	0	47	25	23	54	95
2045	79	18	23	0	48	27	22	54	97
2046	82	18	22	0	50	29	20	53	100
2047	85	17	20	0	52	31	19	53	102
2048	89	16	18	0	53	33	18	53	105
2049	92	15	16	0	55	36	16	53	107
2050	96	14	15	0	57	39	15	53	110

\* denotes last year of higher accuracy

**Projection Number 7**

This projection assumes that the number of ordinands will decrease to 0 (the lowest of three considered amounts) in the final year of the projection (i.e., 2050). The assumed retirement age is at 70 years old (the middle of three considerations). It is assumed that none of the retired priests will continue to serve.

Year	Available for Active Service #	Not-active #	Dependency Ratio %	Age Groups				Average Age	Total #
				<30 #	30-49 #	50-70 #	>70(r) #		
2020	59	23	39	1	19	39	23	61	82
2021	59	22	38	0	19	39	22	61	81
2022	57	22	39	0	18	39	22	61	79
2023	56	22	40	0	18	37	22	61	78
2024	54	23	42	0	17	37	23	61	77
2025	53	23	43	0	17	36	23	61	76
2026	52	23	44	0	18	33	23	61	75
2027	51	22	43	0	17	34	22	62	73
2028	50	22	45	0	17	33	22	62	72
*2029	48	22	46	0	18	30	22	62	71
2030	45	25	55	0	19	26	25	62	69
2031	44	24	54	0	19	25	24	62	68
2032	43	23	53	0	19	24	23	63	66
2033	41	24	60	0	20	21	24	63	65
2034	41	23	56	0	20	20	23	63	63
2035	40	22	54	0	18	22	22	63	62
2036	38	22	59	0	16	22	22	63	60
2037	36	23	64	0	15	21	23	63	59
2038	35	22	62	0	13	22	22	64	57
2039	34	22	64	0	11	23	22	64	55
2040	33	21	63	0	10	23	21	64	54
2041	32	20	61	0	9	24	20	64	52
2042	31	20	63	0	8	23	20	64	51
2043	29	19	66	0	8	22	19	65	49
2044	29	19	65	0	7	22	19	65	47
2045	27	18	68	0	7	21	18	65	46
2046	26	18	67	0	6	20	18	65	44
2047	26	16	62	0	5	21	16	66	42
2048	24	16	66	0	5	20	16	66	41
2049	23	15	66	0	4	19	15	66	39
2050	23	14	61	0	4	20	14	67	37

\* denotes last year of higher accuracy



**Projection Number 8**

This projection assumes that the number of ordinands will decrease to 0 (the lowest of three considered amounts) in the final year of the projection (i.e., 2050). The assumed retirement age is at 70 years old (the middle of three considerations). Reduced priestly service will continue for 5 years after retirement age.

Year	Available for Active Service #	Not-active #	Dependency Ratio %	Age Groups				Average Age	Total #
				<30 #	30-49 #	50-70 #	>70(r) #		
2020	62	20	33	1	19	39	23	61	82
2021	60	20	34	0	19	39	22	61	81
2022	59	20	34	0	18	39	22	61	79
2023	59	20	33	0	18	37	22	61	78
2024	58	19	33	0	17	37	23	61	77
2025	57	19	34	0	17	36	23	61	76
2026	55	19	35	0	18	33	23	61	75
2027	54	19	36	0	17	34	22	62	73
2028	53	19	37	0	17	33	22	62	72
*2029	51	19	38	0	18	30	22	62	71
2030	50	20	40	0	19	26	25	62	69
2031	48	20	41	0	19	25	24	62	68
2032	46	20	43	0	19	24	23	63	66
2033	45	20	46	0	20	21	24	63	65
2034	43	20	47	0	20	20	23	63	63
2035	42	20	47	0	18	22	22	63	62
2036	41	19	48	0	16	22	22	63	60
2037	39	19	50	0	15	21	23	63	59
2038	38	19	50	0	13	22	22	64	57
2039	37	19	51	0	11	23	22	64	55
2040	35	19	53	0	10	23	21	64	54
2041	34	18	53	0	9	24	20	64	52
2042	33	18	53	0	8	23	20	64	51
2043	32	17	54	0	8	22	19	65	49
2044	31	17	54	0	7	22	19	65	47
2045	29	16	55	0	7	21	18	65	46
2046	28	16	56	0	6	20	18	65	44
2047	27	15	56	0	5	21	16	66	42
2048	26	15	56	0	5	20	16	66	41
2049	25	14	56	0	4	19	15	66	39
2050	24	13	55	0	4	20	14	67	37

\* denotes last year of higher accuracy

**Projection Number 9**

This projection assumes that the number of ordinands will remain steady at 1 (the middle of three considered amounts) until the last year of the projection (i.e., 2050). The assumed retirement age is at 70 years old (the middle of three considerations). It is assumed that none of the retired priests will continue to serve.

Year	Available for Active Service #	Not-active #	Dependency Ratio %	Age Groups				Average Age	Total #
				<30 #	30-49 #	50-70 #	>70(r) #		
2020	59	23	39	1	19	39	23	61	82
2021	59	22	38	0	19	39	22	61	81
2022	57	22	39	0	18	39	22	61	80
2023	56	22	40	0	19	37	22	61	79
2024	55	23	41	0	18	37	23	61	77
2025	54	23	42	0	18	36	23	61	76
2026	53	23	44	0	19	33	23	61	75
2027	52	22	42	0	18	34	22	61	74
2028	51	22	43	0	19	33	22	61	73
*2029	50	22	44	0	20	30	22	61	73
2030	47	25	53	0	21	26	25	61	72
2031	47	24	51	0	21	25	24	61	71
2032	47	23	49	0	22	24	23	62	70
2033	44	24	55	0	24	21	24	62	69
2034	45	23	50	0	25	20	23	61	68
2035	45	22	48	0	23	22	22	61	67
2036	44	22	51	0	22	22	22	61	66
2037	42	23	54	0	21	21	23	61	65
2038	42	22	52	0	20	22	22	61	64
2039	42	22	52	0	18	23	22	61	63
2040	42	21	50	0	18	24	21	61	62
2041	42	20	47	0	17	25	20	61	62
2042	41	20	48	0	17	24	20	61	61
2043	41	19	48	0	17	23	19	61	60
2044	41	19	46	0	17	24	19	60	59
2045	40	18	46	0	17	23	18	60	59
2046	40	18	44	0	17	23	18	60	58
2047	41	16	39	0	17	24	16	60	57
2048	41	16	40	0	17	24	16	60	57
2049	41	15	38	0	17	24	15	60	56
2050	42	14	34	0	17	25	14	60	56

\* denotes last year of higher accuracy

**Projection Number 10**

This projection assumes that the number of ordinands will remain steady at 1 (the middle of three considered amounts) until the last year of the projection (i.e., 2050). The assumed retirement age is at 70 years old (the middle of three considerations). Reduced priestly service will continue for 5 years after retirement age.

Year	Available for Active Service #	Not-active #	Dependency Ratio %	Age Groups				Average Age	Total #
				<30 #	30-49 #	50-70 #	>70(r) #		
2020	62	20	33	1	19	39	23	61	82
2021	60	20	34	0	19	39	22	61	81
2022	59	20	34	0	18	39	22	61	80
2023	59	20	33	0	19	37	22	61	79
2024	58	19	33	0	18	37	23	61	77
2025	57	19	34	0	18	36	23	61	76
2026	56	19	35	0	19	33	23	61	75
2027	55	19	35	0	18	34	22	61	74
2028	54	19	36	0	19	33	22	61	73
*2029	53	19	36	0	20	30	22	61	73
2030	52	20	38	0	21	26	25	61	72
2031	51	20	39	0	21	25	24	61	71
2032	50	20	40	0	22	24	23	62	70
2033	48	20	42	0	24	21	24	62	69
2034	47	20	43	0	25	20	23	61	68
2035	47	20	42	0	23	22	22	61	67
2036	46	19	42	0	22	22	22	61	66
2037	46	19	43	0	21	21	23	61	65
2038	45	19	42	0	20	22	22	61	64
2039	44	19	42	0	18	23	22	61	63
2040	44	19	42	0	18	24	21	61	62
2041	44	18	42	0	17	25	20	61	62
2042	43	18	40	0	17	24	20	61	61
2043	43	17	40	0	17	23	19	61	60
2044	43	17	39	0	17	24	19	60	59
2045	43	16	38	0	17	23	18	60	59
2046	42	16	37	0	17	23	18	60	58
2047	42	15	36	0	17	24	16	60	57
2048	42	15	34	0	17	24	16	60	57
2049	42	14	33	0	17	24	15	60	56
2050	43	13	31	0	17	25	14	60	56

\* denotes last year of higher accuracy

**Projection Number 11**

This projection assumes that the number of ordinands will increase to 5 (the highest of three considered amounts) in the final year of the projection (i.e., 2050). The assumed retirement age is at 70 years old (the middle of three considerations). It is assumed that none of the retired priests will continue to serve.

Year	Available for Active Service #	Not-active #	Dependency Ratio %	Age Groups				Average Age	Total #
				<30 #	30-49 #	50-70 #	>70(r) #		
2020	59	23	39	1	19	39	23	61	82
2021	59	22	38	0	19	39	22	61	81
2022	58	22	39	0	19	39	22	61	80
2023	57	22	40	0	19	37	22	61	79
2024	56	23	40	0	19	37	23	61	79
2025	55	23	41	0	20	36	23	61	78
2026	55	23	42	0	22	33	23	60	78
2027	56	22	40	0	22	34	22	60	78
2028	56	22	40	0	23	33	22	60	78
*2029	56	22	40	0	25	30	22	60	78
2030	54	25	46	0	28	26	25	60	78
2031	55	24	43	0	29	25	24	59	79
2032	56	23	41	0	32	24	23	59	79
2033	55	24	44	0	35	21	24	59	80
2034	58	23	39	0	38	20	23	58	81
2035	60	22	36	0	37	22	22	58	81
2036	60	22	37	0	38	22	22	57	82
2037	61	23	38	0	39	22	23	57	84
2038	63	22	35	0	40	23	22	56	85
2039	65	22	34	0	39	25	22	56	86
2040	67	21	31	0	41	26	21	56	88
2041	70	20	28	0	42	28	20	55	89
2042	72	20	27	0	43	28	20	55	91
2043	74	19	26	0	45	29	19	54	93
2044	77	19	24	0	47	30	19	54	95
2045	79	18	23	0	49	30	18	54	97
2046	82	18	22	0	50	32	18	53	100
2047	86	16	19	0	52	34	16	53	102
2048	89	16	18	0	54	35	16	53	105
2049	92	15	17	0	55	37	15	53	108
2050	97	14	15	0	57	40	14	52	111

\* denotes last year of higher accuracy

**Projection Number 12**

This projection assumes that the number of ordinands will increase to 5 (the highest of three considered amounts) in the final year of the projection (i.e., 2050). The assumed retirement age is at 70 years old (the middle of three considerations). Reduced priestly service will continue for 5 years after retirement age.

Year	Available for Active Service #	Not-active #	Dependency Ratio %	Age Groups				Average Age	Total #
				<30 #	30-49 #	50-70 #	>70(r) #		
2020	62	20	33	1	19	39	23	61	82
2021	60	20	34	0	19	39	22	61	81
2022	60	20	34	0	19	39	22	61	80
2023	60	20	33	0	19	37	22	61	79
2024	59	19	32	0	19	37	23	61	79
2025	59	19	33	0	20	36	23	61	78
2026	59	19	33	0	22	33	23	60	78
2027	58	19	33	0	22	34	22	60	78
2028	59	19	33	0	23	33	22	60	78
*2029	59	19	33	0	25	30	22	60	78
2030	59	20	34	0	28	26	25	60	78
2031	59	20	34	0	29	25	24	59	79
2032	59	20	34	0	32	24	23	59	79
2033	59	20	34	0	35	21	24	59	80
2034	60	20	34	0	38	20	23	58	81
2035	62	20	32	0	37	22	22	58	81
2036	63	19	31	0	38	22	22	57	82
2037	64	19	30	0	39	22	23	57	84
2038	66	19	29	0	40	23	22	56	85
2039	67	19	28	0	39	25	22	56	86
2040	69	19	27	0	41	26	21	56	88
2041	71	18	25	0	42	28	20	55	89
2042	74	18	24	0	43	28	20	55	91
2043	76	17	22	0	45	29	19	54	93
2044	79	17	21	0	47	30	19	54	95
2045	81	16	20	0	49	30	18	54	97
2046	84	16	19	0	50	32	18	53	100
2047	87	15	17	0	52	34	16	53	102
2048	90	15	16	0	54	35	16	53	105
2049	94	14	15	0	55	37	15	53	108
2050	97	13	14	0	57	40	14	52	111

\* denotes last year of higher accuracy

**Projection Number 13**

This projection assumes that the number of ordinands will decrease to 0 (the lowest of three considered amounts) in the final year of the projection (i.e., 2050). The assumed retirement age is at 75 years old (the highest of three considerations). It is assumed that none of the retired priests will continue to serve.

Year	Available for Active Service #	Not-active #	Dependency Ratio %	Age Groups				Average Age	Total #
				<30 #	30-49 #	50-75 #	>75(r) #		
2020	70	12	17	1	19	50	12	61	82
2021	68	12	18	0	19	49	12	61	81
2022	65	15	23	0	18	46	15	61	79
2023	60	18	30	0	18	42	18	61	78
2024	61	16	27	0	17	43	16	61	77
2025	61	15	24	0	17	44	15	61	76
2026	60	14	24	0	18	42	14	61	75
2027	59	15	25	0	17	41	15	62	73
2028	57	15	26	0	17	40	15	62	72
*2029	56	15	27	0	18	38	15	62	71
2030	54	15	28	0	19	35	15	62	69
2031	53	15	29	0	19	34	15	62	68
2032	52	14	28	0	19	33	14	63	66
2033	51	14	29	0	20	31	14	63	65
2034	49	14	29	0	20	29	14	63	64
2035	45	16	36	0	18	28	16	63	62
2036	45	16	35	0	16	28	16	63	60
2037	44	15	34	0	15	29	15	63	59
2038	41	16	39	0	13	28	16	64	57
2039	41	15	35	0	11	30	15	64	56
2040	40	14	34	0	10	30	14	64	54
2041	38	14	37	0	9	29	14	64	52
2042	36	15	41	0	8	28	15	64	51
2043	35	14	40	0	8	27	14	65	49
2044	34	14	41	0	7	26	14	65	47
2045	33	13	40	0	7	26	13	65	46
2046	32	12	39	0	6	26	12	65	44
2047	30	12	41	0	5	25	12	66	42
2048	29	12	43	0	5	24	12	66	41
2049	28	12	42	0	4	23	12	66	39
2050	26	11	44	0	4	22	11	67	37

\* denotes last year of higher accuracy

**Projection Number 14**

This projection assumes that the number of ordinands will decrease to 0 (the lowest of three considered amounts) in the final year of the projection (i.e., 2050). The assumed retirement age is at 75 years old (the highest of three considerations). Reduced priestly service will continue for 3 years after retirement age.

Year	Available for Active Service #	Not-active #	Dependency Ratio %	Age Groups				Average Age	Total #
				<30 #	30-49 #	50-75 #	>75(r) #		
2020	72	10	14	1	19	50	12	61	82
2021	70	11	15	0	19	49	12	61	81
2022	68	12	17	0	18	46	15	61	79
2023	65	14	21	0	18	42	18	61	78
2024	62	15	24	0	17	43	16	61	77
2025	61	15	24	0	17	44	15	61	76
2026	61	14	23	0	18	42	14	61	75
2027	60	13	22	0	17	41	15	62	73
2028	59	13	23	0	17	40	15	62	72
*2029	57	13	23	0	18	38	15	62	71
2030	56	14	24	0	19	35	15	62	69
2031	54	14	25	0	19	34	15	62	68
2032	53	14	25	0	19	33	14	63	66
2033	52	13	26	0	20	31	14	63	65
2034	50	13	26	0	20	29	14	63	64
2035	48	14	29	0	18	28	16	63	62
2036	46	14	30	0	16	28	16	63	60
2037	45	14	32	0	15	29	15	63	59
2038	43	14	33	0	13	28	16	64	57
2039	42	14	33	0	11	30	15	64	56
2040	41	13	33	0	10	30	14	64	54
2041	40	13	32	0	9	29	14	64	52
2042	38	13	34	0	8	28	15	64	51
2043	36	13	36	0	8	27	14	65	49
2044	35	13	37	0	7	26	14	65	47
2045	33	12	36	0	7	26	13	65	46
2046	32	12	36	0	6	26	12	65	44
2047	31	11	36	0	5	25	12	66	42
2048	30	11	37	0	5	24	12	66	41
2049	28	11	38	0	4	23	12	66	39
2050	27	10	39	0	4	22	11	67	37

\* denotes last year of higher accuracy

**Projection Number 15**

This projection assumes that the number of ordinands will remain steady at 1 (the middle of three considered amounts) until the last year of the projection (i.e., 2050). The assumed retirement age is at 75 years old (the highest of three considerations). It is assumed that none of the retired priests will continue to serve.

Year	Available for Active Service #	Not-active #	Dependency Ratio %	Age Groups				Average Age	Total #
				<30 #	30-49 #	50-75 #	>75(r) #		
2020	70	12	17	1	19	50	12	61	82
2021	68	12	18	0	19	49	12	61	81
2022	65	15	23	0	18	46	15	61	80
2023	61	18	29	0	19	42	18	61	79
2024	61	16	27	0	18	43	16	61	77
2025	62	15	24	0	18	44	15	61	76
2026	61	14	23	0	19	42	14	61	75
2027	60	15	24	0	19	41	15	61	74
2028	59	15	25	0	19	40	15	61	74
*2029	58	15	26	0	20	38	15	61	73
2030	57	15	27	0	21	35	15	61	72
2031	56	15	27	0	21	34	15	61	71
2032	55	14	26	0	23	33	14	61	70
2033	54	14	27	0	24	31	14	61	69
2034	53	14	27	0	25	29	14	61	68
2035	50	16	33	0	23	28	16	61	67
2036	50	16	31	0	22	28	16	61	66
2037	50	15	30	0	21	29	15	61	65
2038	48	16	33	0	20	28	16	61	64
2039	49	15	30	0	18	31	15	61	63
2040	49	14	28	0	18	31	14	61	63
2041	48	14	30	0	17	30	14	61	62
2042	46	15	32	0	17	29	15	61	61
2043	46	14	30	0	17	29	14	61	60
2044	46	14	30	0	17	29	14	60	60
2045	46	13	28	0	17	29	13	60	59
2046	46	12	27	0	17	29	12	60	58
2047	45	12	27	0	17	28	12	60	58
2048	45	12	27	0	17	28	12	60	57
2049	45	12	26	0	17	28	12	60	57
2050	45	11	26	0	17	27	11	60	56

\* denotes last year of higher accuracy



**Projection Number 16**

This projection assumes that the number of ordinands will remain steady at 1 (the middle of three considered amounts) until the last year of the projection (i.e., 2050). The assumed retirement age is at 75 years old (the highest of three considerations). Reduced priestly service will continue for 3 years after retirement age.

Year	Available for Active Service #	Not-active #	Dependency Ratio %	Age Groups				Average Age	Total #
				<30 #	30-49 #	50-75 #	>75(r) #		
2020	72	10	14	1	19	50	12	61	82
2021	70	11	15	0	19	49	12	61	81
2022	68	12	17	0	18	46	15	61	80
2023	65	14	21	0	19	42	18	61	79
2024	63	15	24	0	18	43	16	61	77
2025	62	15	24	0	18	44	15	61	76
2026	62	14	22	0	19	42	14	61	75
2027	61	13	22	0	19	41	15	61	74
2028	60	13	22	0	19	40	15	61	74
*2029	59	13	23	0	20	38	15	61	73
2030	58	14	23	0	21	35	15	61	72
2031	57	14	24	0	21	34	15	61	71
2032	56	14	24	0	23	33	14	61	70
2033	55	13	24	0	24	31	14	61	69
2034	55	13	24	0	25	29	14	61	68
2035	53	14	26	0	23	28	16	61	67
2036	52	14	27	0	22	28	16	61	66
2037	51	14	28	0	21	29	15	61	65
2038	50	14	28	0	20	28	16	61	64
2039	50	14	28	0	18	31	15	61	63
2040	49	13	27	0	18	31	14	61	63
2041	49	13	26	0	17	30	14	61	62
2042	48	13	27	0	17	29	15	61	61
2043	47	13	27	0	17	29	14	61	60
2044	47	13	27	0	17	29	14	60	60
2045	47	12	26	0	17	29	13	60	59
2046	47	12	25	0	17	29	12	60	58
2047	46	11	24	0	17	28	12	60	58
2048	46	11	24	0	17	28	12	60	57
2049	46	11	23	0	17	28	12	60	57
2050	46	10	23	0	17	27	11	60	56

\* denotes last year of higher accuracy

**Projection Number 17**

This projection assumes that the number of ordinands will increase to 5 (the highest of three considered amounts) in the final year of the projection (i.e., 2050). The assumed retirement age is at 75 years old (the highest of three considerations). It is assumed that none of the retired priests will continue to serve.

Year	Available for Active Service #	Not-active #	Dependency Ratio %	Age Groups				Average Age	Total #
				<30 #	30-49 #	50-75 #	>75(r) #		
2020	70	12	17	1	19	50	12	61	82
2021	68	12	18	0	19	49	12	61	81
2022	65	15	23	0	19	46	15	61	80
2023	61	18	29	0	19	42	18	61	79
2024	62	16	26	0	19	43	16	61	79
2025	63	15	23	0	20	44	15	61	78
2026	64	14	23	0	22	42	14	60	78
2027	63	15	23	0	22	41	15	60	78
2028	63	15	23	0	23	40	15	60	78
*2029	63	15	24	0	25	38	15	60	78
2030	63	15	24	0	28	35	15	59	78
2031	64	15	24	0	29	34	15	59	79
2032	65	14	22	0	32	33	14	59	79
2033	65	14	22	0	35	31	14	58	80
2034	66	14	22	0	38	29	14	58	81
2035	65	16	25	0	37	28	16	58	82
2036	67	16	23	0	38	29	16	57	83
2037	69	15	22	0	39	30	15	57	84
2038	69	16	23	0	40	29	16	56	85
2039	72	15	20	0	39	32	15	56	86
2040	74	14	18	0	41	33	14	56	88
2041	75	14	19	0	42	34	14	55	90
2042	77	15	19	0	44	33	15	55	91
2043	80	14	18	0	45	34	14	54	93
2044	82	14	17	0	47	35	14	54	96
2045	85	13	15	0	49	36	13	54	98
2046	88	12	14	0	50	38	12	53	100
2047	90	12	14	0	52	38	12	53	103
2048	93	12	13	0	54	39	12	53	105
2049	97	12	12	0	55	41	12	53	108
2050	100	11	12	0	57	43	11	52	111

\* denotes last year of higher accuracy

**Projection Number 18**

This projection assumes that the number of ordinands will increase to 5 (the highest of three considered amounts) in the final year of the projection (i.e., 2050). The assumed retirement age is at 75 years old (the highest of three considerations). Reduced priestly service will continue for 3 years after retirement age.

Year	Available for Active Service #	Not-active #	Dependency Ratio %	Age Groups				Average Age	Total #
				<30 #	30-49 #	50-75 #	>75(r) #		
2020	72	10	14	1	19	50	12	61	82
2021	70	11	15	0	19	49	12	61	81
2022	68	12	17	0	19	46	15	61	80
2023	66	14	21	0	19	42	18	61	79
2024	64	15	23	0	19	43	16	61	79
2025	63	15	23	0	20	44	15	61	78
2026	64	14	21	0	22	42	14	60	78
2027	65	13	21	0	22	41	15	60	78
2028	65	13	20	0	23	40	15	60	78
*2029	65	13	21	0	25	38	15	60	78
2030	65	14	21	0	28	35	15	59	78
2031	65	14	21	0	29	34	15	59	79
2032	66	14	21	0	32	33	14	59	79
2033	67	13	20	0	35	31	14	58	80
2034	68	13	19	0	38	29	14	58	81
2035	68	14	20	0	37	28	16	58	82
2036	68	14	21	0	38	29	16	57	83
2037	70	14	20	0	39	30	15	57	84
2038	71	14	20	0	40	29	16	56	85
2039	73	14	19	0	39	32	15	56	86
2040	75	13	18	0	41	33	14	56	88
2041	77	13	17	0	42	34	14	55	90
2042	79	13	16	0	44	33	15	55	91
2043	81	13	16	0	45	34	14	54	93
2044	83	13	15	0	47	35	14	54	96
2045	86	12	14	0	49	36	13	54	98
2046	88	12	13	0	50	38	12	53	100
2047	91	11	12	0	52	38	12	53	103
2048	94	11	12	0	54	39	12	53	105
2049	97	11	11	0	55	41	12	53	108
2050	101	10	10	0	57	43	11	52	111

\* denotes last year of higher accuracy

## Part III. Methodology

The forecasting model used in this report was developed at CARA and builds on the work of Dr. C. Joseph O'Hara, who first created his conceptual framework for projecting priest personnel at Loras College in 1983. By 2016, he had prepared CARA projections for over 70 archdioceses and dioceses in the United States. Those projections had, on average, a 5.3 percent margin of error (in regard to the total number of diocesan priests).

The new model used by CARA builds on this vast body of accumulated knowledge and over thirty years of experience. The new model is, on average, 1.8 percentage points more accurate (with the benefit of hindsight) when applied to the same set of historical data.

Conceptually, the overall number of diocesan priests at the Diocese for a selected year in the future depends on a handful of main factors that will occur every year until that selected year:

- The number of ordinations that tend to occur at younger ages (relative to the average age of all diocesan priests).
- The number of incardinations that usually occur at older ages than ordinations.
- The number of diocesan priests leaving the Diocese permanently due to, for example, excommunication, resignation, defection, or due to considerable and persistent disability. The likelihood of specific events occurring is different for different age groups. Those who choose to leave tend to be younger while those who leave due to health issues tend to be older.
- The number of deaths that are more likely to occur with older age.

The following sections describe how this conceptual framework is applied in the *Forecasting Model*, detail the *Empirical Input Data* used to prepare the projections, and provide a comparison to *Previous Reports* if CARA had the opportunity to prepare projections for the Diocese in the past.

### Forecasting Model

The forecasting model used in this report is based on the three-part implementation of the population equation for small populations. The first equation is the following:

$$\text{TotalAll} = (\text{PreviousYear} + \text{Ordinations}) \times (1 + \text{Incardinations}) \times (1 - \text{LeftPermanently}) \times (1 - \text{Death})$$

where:

- **TotalAll** is the total number of diocesan priests in the Diocese in a given year.
- **PreviousYear** is the total number of diocesan priests in the Diocese in the previous year.
- **Ordinations** is the number of ordinations projected to take place in a given year. The number of ordinations in the model is based on a linear function that increases, remains constant, or decreases over time depending on the assumption of a particular projection.
- **Incardinations** represent the percentage probability of priests being incardinated relative to all priests between ages 30 and 47, in a given year. The value of this variable is a constant calculated from historical data specific to the Diocese. The age range is based on the following study: Gautier, Mary L., Mark M. Gray, Paul M. Perl, and Melissa A.

Cidade. 2014. *Bridging the Gap: The Opportunities and Challenges of International Priests Ministering in the United States*. Our Sunday Visitor.

- **Left Permanently** represents the percentage probability of diocesan priests leaving in a given year. The value of this variable is a constant calculated from historical data specific to the Diocese. The variable is applied to priests who are between average age of ordination and retirement age.
- **Death** is the probability of death at different ages based on the nationally representative government statistics. Since death probability applies to all priests including those incardinated and ordained in a given year, the model compounds all the considered variables (as opposed to adding those variables).

The second equation is the following:

$$\text{TotalActive} = \text{TotalAll} \times (1 - \text{LeftTemporarily}) \times \text{ServicePastRetirement}$$

where:

- **TotalActive** is the total number of diocesan priests in the Diocese who are active in a given year (depending on the projection, this may include priests who are past retirement age but chose to remain active).
- **TotalAll** is the total number of diocesan priests in the Diocese in a given year (it is the result of the first equation).
- **LeftTemporarily** is the share of priests not available for service in a given year. It is calculated as the historical average adjusted number of those who leave temporarily divided by the adjusted number of priests in base year. It is applied to priests who are between the average age of ordination and retirement age.
- **ServicePastRetirement** is a percentage of retired diocesan priests who remain active after retirement for each age in a given year. This percentage decreases linearly for each next year of age based on a ratio dependent on the retirement age policy. The different values of the ratio are derived from:  
C. Joseph O'Hara. 2016. *A Projection of Priests*. Center for Applied Research in the Apostolate. Washington, DC.

The third equation is the following:

$$\text{TotalNotActive} = \text{TotalAll} - \text{TotalActive}$$

where:

- **TotalNotActive** is the total number of not-active diocesan priests in a given year.
- **TotalAll** is the total number of diocesan priests in the Diocese in a given year (it is the result of the first equation).
- **TotalActive** is the total number of diocesan priests in the Diocese who are active in a given year (it is the result of the second equation).

The above described forecasting model is used to prepare 18 projections that represent 18 combinations of three variables:

- **Ordinations** that can take low, medium, or high values.
- **RetirementAge** that can take low, medium, or high values.
- **AvailabilityOfServicePastRetirement** that can take two values: yes or no.

Notably, the latter two of the above three variables are not directly included in the equations above. They are used to calculate several variables that are included in those equations (i.e., LeftPermanently, LeftTemporarily, and ServicePastRetirement).

The accuracy of the projections largely depends on the following values derived from the next section titled *Empirical Input Data*:

- the original number of diocesan priests by age,
- the number of priests incardinated in the past ten years,
- the number of diocesan priests leaving active ministry in the past ten years,
- average age at ordination over the past ten years,
- the death probability for men in the United States by age.

The more the values above change between the year this report was prepared and the projected year, the less accurate the projections are likely to be.

## Empirical Input Data

The report relies on death probability data derived from: Social Security Administration. 2018. *Actuarial Life Table for 2015* (retrieved in 2020 from <https://www.ssa.gov/oact/STATS/table4c6.html#fn1>).

With the exception of the above, all data for the projections were provided by the Diocese of Jefferson City on the following form:

<p>1. Name of the Arch/diocese:</p> <p>_____</p> <p>Name of person completing this form:</p> <p>_____</p> <p>Phone:</p> <p>_____</p> <p>82 2. Total number of living priests ordained for or incardinated in this Diocese.</p> <p>69 3. Number of diocesan priests in active service. Do not include retired priests, even if they still cover weekend Masses.</p> <p>0 4. Number of priests incardinated in the past ten years.</p> <p>1 5. Number of diocesan priests leaving active ministry (priesthood) in the past ten years.</p> <p>75 6. Current retirement age.</p> <p>1 7. Approximate number of diocesan priests serving after retirement age.</p> <p>36 8. Average age at ordination over the past ten years.</p> <p>0 9. Number of religious priests in active service in the Diocese.</p> <p>10. Actual and anticipated ordinations for this Diocese.</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Ordinations</th> <th style="text-align: left;">Ordinations</th> <th style="text-align: left;">Anticipated Ordinations</th> </tr> </thead> <tbody> <tr> <td>1 2011</td> <td>1 2016</td> <td>1 2021</td> </tr> <tr> <td>5 2012</td> <td>1 2017</td> <td>0 2022</td> </tr> <tr> <td>2 2013</td> <td>0 2018</td> <td>0 2023</td> </tr> <tr> <td>1 2014</td> <td>1 2019</td> <td>1 2024</td> </tr> <tr> <td>3 2015</td> <td>0 2020</td> <td>2 2025</td> </tr> </tbody> </table>	Ordinations	Ordinations	Anticipated Ordinations	1 2011	1 2016	1 2021	5 2012	1 2017	0 2022	2 2013	0 2018	0 2023	1 2014	1 2019	1 2024	3 2015	0 2020	2 2025	<p>11. Counting all priests from item #2, please indicate the number of priests by age:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">#Priests</th> <th style="text-align: left;">Age</th> <th style="text-align: left;">#Priests</th> <th style="text-align: left;">Age</th> </tr> </thead> <tbody> <tr><td>0</td><td>25</td><td>2</td><td>63</td></tr> <tr><td>0</td><td>26</td><td>1</td><td>64</td></tr> <tr><td>0</td><td>27</td><td>2</td><td>65</td></tr> <tr><td>0</td><td>28</td><td>2</td><td>66</td></tr> <tr><td>1</td><td>29</td><td>2</td><td>67</td></tr> <tr><td>0</td><td>30</td><td>2</td><td>68</td></tr> <tr><td>2</td><td>31</td><td>2</td><td>69</td></tr> <tr><td>1</td><td>32</td><td>1</td><td>70</td></tr> <tr><td>1</td><td>33</td><td>0</td><td>71</td></tr> <tr><td>1</td><td>34</td><td>0</td><td>72</td></tr> <tr><td>2</td><td>35</td><td>5</td><td>73</td></tr> <tr><td>0</td><td>36</td><td>4</td><td>74</td></tr> <tr><td>0</td><td>37</td><td>2</td><td>75</td></tr> <tr><td>0</td><td>38</td><td>2</td><td>76</td></tr> <tr><td>1</td><td>39</td><td>1</td><td>77</td></tr> <tr><td>0</td><td>40</td><td>0</td><td>78</td></tr> <tr><td>0</td><td>41</td><td>0</td><td>79</td></tr> <tr><td>1</td><td>42</td><td>0</td><td>80</td></tr> <tr><td>2</td><td>43</td><td>1</td><td>81</td></tr> <tr><td>0</td><td>44</td><td>1</td><td>82</td></tr> <tr><td>1</td><td>45</td><td>1</td><td>83</td></tr> <tr><td>2</td><td>46</td><td>1</td><td>84</td></tr> <tr><td>1</td><td>47</td><td>1</td><td>85</td></tr> <tr><td>2</td><td>48</td><td>0</td><td>86</td></tr> <tr><td>2</td><td>49</td><td>1</td><td>87</td></tr> <tr><td>1</td><td>50</td><td>0</td><td>88</td></tr> <tr><td>1</td><td>51</td><td>0</td><td>89</td></tr> <tr><td>2</td><td>52</td><td>2</td><td>90</td></tr> <tr><td>1</td><td>53</td><td>0</td><td>91</td></tr> <tr><td>3</td><td>54</td><td>0</td><td>92</td></tr> <tr><td>3</td><td>55</td><td>0</td><td>93</td></tr> <tr><td>1</td><td>56</td><td>0</td><td>94</td></tr> <tr><td>0</td><td>57</td><td>0</td><td>95</td></tr> <tr><td>4</td><td>58</td><td>0</td><td>96</td></tr> <tr><td>1</td><td>59</td><td>0</td><td>97</td></tr> <tr><td>1</td><td>60</td><td>0</td><td>98</td></tr> <tr><td>5</td><td>61</td><td>1</td><td>99</td></tr> <tr><td>2</td><td>62</td><td>0</td><td>100+</td></tr> </tbody> </table>	#Priests	Age	#Priests	Age	0	25	2	63	0	26	1	64	0	27	2	65	0	28	2	66	1	29	2	67	0	30	2	68	2	31	2	69	1	32	1	70	1	33	0	71	1	34	0	72	2	35	5	73	0	36	4	74	0	37	2	75	0	38	2	76	1	39	1	77	0	40	0	78	0	41	0	79	1	42	0	80	2	43	1	81	0	44	1	82	1	45	1	83	2	46	1	84	1	47	1	85	2	48	0	86	2	49	1	87	1	50	0	88	1	51	0	89	2	52	2	90	1	53	0	91	3	54	0	92	3	55	0	93	1	56	0	94	0	57	0	95	4	58	0	96	1	59	0	97	1	60	0	98	5	61	1	99	2	62	0	100+
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## Previous Reports

CARA prepared Priest Personnel Projections for the Diocese of Jefferson City two times before (in 1989 and 1995).

- According to the Priest Personnel Projection prepared in 1989, that year, in the Diocese of Jefferson City, there were 124 priests in total and 3 ordinations a year on average (on average, at 32 years old).
- According to the Priest Personnel Projection prepared in 1995, that year, in the Diocese of Jefferson City, there were 116 priests in total and 2 ordinations a year on average (on average, at 31 years old). The 1989 report accurately projected between 116 and 119 priests in 1995.
- According to this Priest Personnel Projection prepared in 2020, that year, in the Diocese of Jefferson City, there were 91 priests in total (82 living priests ordained for or incardinated in this Diocese and 9 priests in the process of moving out) and 1 ordination a year on average (on average, at 36 years old). The 1989 report accurately projected between 57 and 103 priests in 2020. The 1995 report accurately projected between 87 and 109 priests in 2020.

If the current projection for the total number of priests appears inaccurate relative to the current situation in the Diocese or more than ten years have passed since this report was prepared, consider contacting CARA to prepare a new set of projections.

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