

Exhibit 562

Expert Report of Andrew Brod, Ph.D.

In the matter of

Richard Sparks v. United States of America

Case No. 7:23-CV-00682

May 8, 2025



1. Introduction

In this report, I provide a preliminary assessment and rebuttal of the plaintiff's expert report regarding economic damages in Sparks v. USA. The report, written by Chad L. Staller and Stephen M. Dripps (S&D), claims damages for lost earnings, lost household services, and the value of a life-care plan (LCP).

Mr. Sparks was diagnosed with Parkinson's disease (PD) in December 2013, and he claims that the diagnosis resulted from his exposure to contaminated water at Camp Lejeune. He further claims to have incurred economic damages as a result of that exposure. For the sole purpose of producing this report, I will assume that liability has been established.

In addition, I will address the issue of offsets for Mr. Sparks's support and care by the U.S. government.

As further information becomes available on any of the issues addressed in this memorandum, I may update my analysis.

2. About Dr. Brod

I did my undergraduate work at the University of Illinois and earned a Ph.D. in economics from the University of Minnesota. My undergraduate majors were mathematics and economics, and my graduate fields were econometrics and industrial organization. I have worked for the American Medical Association and the University of North Carolina at Greensboro. At UNCG, I taught courses in statistics, forecasting, econometrics, and microeconomics, and I directed an applied economic research center for more than a decade. I retired from UNCG in 2010 and have worked since then as a self-employed economic consultant.

I have worked in forensic economics for more than 25 years. I work for both plaintiffs and defendants, primarily analyzing and testifying about economic damages, though I have conducted other kinds of analyses. My work focuses on projections of lost earnings in personal-injury and wrongful-death cases, lost profits in complex commercial cases, and the valuation of life-care plans.

My billing rates are \$480 per hour for case review, research, and report writing; \$240 per hour for out-of-town travel, and \$750 per hour for testimony (with a \$1,800 daily minimum). I bill for my assistant's time at a rate of \$160 per hour.

My resume and a four-year testimony log are included in this report as Appendices B and C. A list of recent publications is included in my resume.

3. Lost Earnings

S&D opine that Mr. Sparks's lost earning capacity is \$413,990. However, the defense vocational expert, Dr. Michael Shahnasarian, has opined that Mr. Sparks retained his earning capacity even after his retirement. Dr. Shahnasarian said in his report that he has concluded that "Mr. Sparks's decision to leave his employment as a customs and border

protection officer in April 2017 was voluntary.” He sums up his opinion by stating the following: “The evidence I reviewed is insufficient to support a claim of loss of earning capacity related to Mr. Sparks’s MCBCL exposures.”¹ If Mr. Sparks lost no earning capacity due to his PD, the implication is that his lost earnings in this action are zero.

4. Lost Household Services

S&D’s report presents a value of lost household services through March 1, 2025, at which point such services are assumed to be covered by the LCP. However, S&D do not express an expert opinion regarding the number of service hours Mr. Sparks could have provided but for his PD. They present an average number of hours based on data published by the U.S. Bureau of Labor Statistics, but that number applies to all men of Mr. Sparks’s age. S&D do not question whether Mr. Sparks would have actually done that many hours of household chores. Instead, they present a calculation for one service hour per week, leaving the task of determining the number of weekly hours to the finder of fact in this case.

Given the uncertainty regarding the extent of Mr. Sparks’s pre-PD provision of household services, and because S&D do not express an opinion about the number of service hours that were lost due to PD, it is my opinion that there is no basis to include lost household services in Mr. Sparks’s economic damages.

5. Future Medical Expenses: Life-Care Plan

A life-care plan (LCP) for Mr. Sparks was prepared by the defense life-care planner, Michael Shahnasarian, Ph.D. The LCP describes various medications, treatments, and equipment that Dr. Shahnasarian believes Mr. Sparks will need in the future as a result of his PD. The plan provides estimates of the costs of these items over Mr. Sparks’s remaining life.

The economic analysis of an LCP involves (a) identifying inflation, or growth, rates that allow medical costs to be projected into the future, and (b) using a discount rate to express the streams of future costs as lump-sum present values.

I took the cost estimates provided in the Shahnasarian LCP and obtained reasonable growth rates for the costs in each category, based on components of the Consumer Price Index (CPI). Following S&D, I calculated average inflation rates over the period 2013-2024. I assigned CPI components in order to capture the bulk of the spending in each category. Table A, on the following page, associates these growth rates with the LCP categories.

In Table A, I divided two categories (Therapeutic Needs, Home Facility Care) into multiple subcategories to capture the different natures (and inflation rates) of the activities in those categories. I didn’t include Diagnostic Tests or the subcategory of Financial Management because they’re one-time expenses.

¹ Both quotes are from p. 50 of Dr. Shahnasarian’s May 2025 Rehabilitation Evaluation report.

Table A: Life-Care Plan Categories and Growth Rates

LCP category	Growth Rate	CPI Component
Evaluations	1.52%	Physicians' services
Therapeutic Needs		
Therapeutic Needs, Other Med	1.45%	Services by other medical professionals
Home Environmental Analysis		
Home Facility Care, Nurse		
Wheelchair Needs	0.84%	Medical equipment and supplies
Aids for Independent Living		
Drugs	2.11%	Prescription drugs
Home Facility Care, ex Nurse	3.49%	Care of elderly and invalids at home

The Shahnasarian LCP expresses costs in ranges for some items, so I followed suit and calculated lower and upper bounds on the value of the LCP. My projections start on March 1, 2025, and extend until the expected end of Mr. Sparks's life. Following S&D, I used CDC demographic data to determine that Mr. Sparks's remaining life expectancy on March 1 was 12.8 years, implying a total life expectancy of 84.1 years.²

In order to calculate the present value of future medical expenses, I discounted all future values using the same 4.35% discount rate used by S&D. The results of my analysis appear in Table B, on the following page; detailed results appear in Appendix A.

Table B: Present Value of Life-Care Plan, by Category

LCP category	Lower	Upper
Evaluations	\$4,617	\$8,399
Therapeutic Needs	\$6,455	\$13,636
Therapeutic Needs, Other Med	\$26,223	\$56,085
Diagnostic Tests	\$529	\$980
Wheelchair Needs	\$5,297	\$6,706
Aids for Independent Living	\$1,640	\$6,600
Drugs	\$11,202	\$56,840
Home Facility Care, Nurse	\$49,498	\$70,711
Home Facility Care, ex Nurse	\$881,791	\$1,193,178
Financial Management	\$2,000	\$2,000
Home Environmental Analysis	\$267	\$356
Total	\$989,519	\$1,415,493

As Table B shows, the present value of the cost of the Shahnasarian LCP is between **\$989,519** and **\$1,415,493**.

² S&D calculate a total life expectancy of 84.2 years as of February 4, 2025, the date of their report.

6. Offsets to Damages

The economic damages in this case are properly offset by certain defined expenses that have been and will be incurred by the federal government on behalf of Mr. Sparks. Such offsets fall into two categories, (a) past and future disability benefits, and (b) past and future medical benefits.

Disability Benefits: Mr. Sparks has received disability benefits from the Veterans Benefits Administration (VBA) since 2016. His currently monthly benefit is \$4,180.97, which corresponds to a 100% disability rating.³ A May 1, 2025 letter from VBA, along with an accompanying spreadsheet, listed Mr. Sparks's disabilities, and all of them are PD-related.⁴ Therefore, all of his VBA benefits are due to his PD, and hence the full amount of \$4,180.97 per month is an offset in the context of this lawsuit.

I summed up past VBA benefits and projected the current benefit into the future, until Mr. Sparks's life expectancy of 84.1 years. By law, the benefit grows each year according to the Social Security Administration's cost-of-living adjustment (COLA). The average COLA for the years 2000-25 was 2.56%, so I assumed that his future VBA benefits will grow at a rate of 2.56% per year. I used the same discount rate as I did to calculate the present value of the LCP.

Based on the above information, the present value of this offset to Mr. Sparks's economic damages in this case, calculated from 2016 until his life expectancy, is **\$963,186**.

Medical Offsets: A memorandum by the Veterans Health Administration (VHA), accompanied by a spreadsheet exhibit, lists the Camp Lejeune-related expenses incurred by VHA on behalf of various CLJA plaintiffs.⁵ The amount listed for Mr. Sparks is **\$13,904.33**. This is the value of his past medical offsets.

Mr. Sparks's future medical offsets are summarized in a report by Henry Miller of the Berkeley Research Group, which lists the projected payments for the items in the Shahnasarian LCP, by both Medicare and VHA. The Miller report retains the categories and treatments of the Shahnasarian LCP, and its implied results can be construed as a pair of modifications of the LCP. The results of the modified Shahnasarian LCPs appear in Tables C and D, both on the following page.

As Table C shows, Medicare is projected to pay between **\$1,298,179** and **\$1,325,214** for the items in the Shahnasarian LCP. The projected payments by VHA appear in Table D, which indicates that the projected coverage by VHA is between **\$1,667,530** and **\$1,751,961**.

The court may decide to subtract these amounts from the corresponding lower and upper bounds of the present value of the original Shahnasarian LCP, to arrive at a net value of the cost of Mr. Sparks's future medical care.

³ VA letter to Sparks, April 4, 2022, 00682_SPARKS_0000004148-4156.

⁴ The accompanying spreadsheet is "RITA_2025-54151_results_04302025.xlsx".

⁵ Veterans Health Administration memorandum by Janine Genovese, March 18, 2025.

Table C: Present Value of Modified LCP, by Category – Medicare

LCP category	Lower	Upper
Evaluations	\$2,444	\$2,444
Therapeutic Needs	\$2,341	\$2,341
Therapeutic Needs, Other Med	\$13,564	\$16,700
Diagnostic Tests	\$197	\$197
Wheelchair Needs	\$5,216	\$5,398
Aids for Independent Living	\$2,289	\$3,931
Drugs	\$18,103	\$18,103
Home Facility Care, Nurse	\$109,046	\$109,046
Home Facility Care, ex Nurse	\$1,144,979	\$1,167,055
Financial Management	\$0	\$0
Home Environmental Analysis	\$0	\$0
Total	\$1,298,179	\$1,325,214

Table D: Present Value of Modified LCP, by Category – VHA

LCP category	Lower	Upper
Evaluations	\$3,055	\$3,055
Therapeutic Needs	\$3,505	\$3,505
Therapeutic Needs, Other Med	\$16,957	\$20,876
Diagnostic Tests	\$247	\$247
Wheelchair Needs	\$6,520	\$6,747
Aids for Independent Living	\$2,861	\$4,914
Drugs	\$0	\$0
Home Facility Care, Nurse	\$109,046	\$109,046
Home Facility Care, ex Nurse	\$1,525,251	\$1,603,483
Financial Management	\$0	\$0
Home Environmental Analysis	\$89	\$89
Total	\$1,667,530	\$1,751,961

7. Plaintiff's LCP

The plaintiff's LCP was produced by Michael Fryar, M.S. S&D calculated the present value of the Fryar LCP to be \$1,557,890. In case the court adopts the Fryar LCP, I calculated the value of the future medical offsets that apply to that LCP. The Miller report provides these offsets as well. As he did with the Shahnasarian LCP, Mr. Miller lists the projected payments by Medicare and VHA for the items in the Fryar LCP. The results of the modified Fryar LCPs appear in Tables E and F, with both tables on the following page.

Table E shows that Medicare is projected to cover between **\$429,422** and **\$430,249** of the cost of the Fryar LCP. Table F, also on the next page, summarizes the payments that would be made by VHA. VHA coverage is projected to pay between **\$1,681,698** and **\$1,682,731** for the services and treatments included in the Fryar LCP.

Table E: Present Value of Modified Fryar LCP, by Category – Medicare

LCP category	Lower	Upper
Physician Care	\$760	\$1,433
Evaluations	\$3,028	\$3,090
Therapies	\$11,912	\$11,912
Medications	\$18,021	\$18,021
Diagnostics and Laboratory Studies	\$371	\$464
Medical Equipment and Supplies	\$11,497	\$11,497
Health and Strength Maintenance	\$0	\$0
Financial Management	\$0	\$0
Support Services	\$0	\$0
Home Care – Nurse	\$22,422	\$22,422
Home Care – ex Nurse	\$322,190	\$322,190
Facility Care	\$39,222	\$39,222
Residential Modifications	\$0	\$0
Total	\$429,422	\$430,249

Table F: Present Value of Modified Fryar LCP, by Category – VHA

LCP category	Lower	Upper
Physician Care	\$1,529	\$2,370
Evaluations	\$3,785	\$3,862
Therapies	\$14,890	\$14,890
Medications	\$0	\$0
Diagnostics and Laboratory Studies	\$464	\$580
Medical Equipment and Supplies	\$14,371	\$14,371
Health and Strength Maintenance	\$0	\$0
Financial Management	\$0	\$0
Support Services	\$0	\$0
Home Care – Nurse	\$22,422	\$22,422
Home Care – ex Nurse	\$322,190	\$322,190
Facility Care	\$1,295,246	\$1,295,246
Residential Modifications	\$6,800	\$6,800
Total	\$1,681,698	\$1,682,731

8. Conclusions

My findings in this report are as follows:

- (a) The value of lost earnings is zero;
- (b) There is no basis for a claim of lost household services;
- (c) The present value of the Shahnasarian LCP is between **\$989,519** and **\$1,415,493**;
- (d) The present value of past and future VBA disability offsets is **\$963,186**;
- (e) Past medical offsets total **\$13,904**;

- (f) The present value of future medical offsets is between **\$1,298,179** and **\$1,325,214** under Medicare coverage, and between **\$1,667,530** and **\$1,751,961** under VHA coverage; and
- (g) If the court adopts the plaintiff's LCP, the present value of future medical offsets is between **\$429,422** and **\$430,249** under Medicare coverage, and between **\$1,681,698** and **\$1,682,731** under VHA coverage.

The opinions set forth in this report, which are my present opinions to a reasonable degree of certainty, are based in part upon my review of the available documents provided to me. The data and facts relied upon in formulating my conclusions are the type of data reasonably and typically relied upon by experts in the field of forensic economics.

9. References

- Short-Form Complaint, filed November 6, 2023
- Life-care plan by Michael Shahnasarian, Ph.D., May 2025
- Rehabilitation Evaluation of Richard Douglas Sparks, Michael Shahnasarian, Ph.D., May 2025
- Expert report by Henry Miller, May 2025
- Expert report by Chad L. Staller and Stephen M. Dripps, February 2025
- Life-care plan by Michael Fryar, M.S., February 2025
- Veterans Administration, letter to Richard Sparks, April 4, 2022, 00682_SPARKS_0000004148-4156
- Letter from VBA, dated May 1, 2025, along with data spreadsheet, "RITA_2025-54151_results_04302025.xlsx"
- Benefits Coordination and Recovery Center, Memorandum by Kathleen Hunter, April 2025, and associated data
- Department of Veterans Affairs, Office of Integrated Veteran Care, Memorandum and exhibit on Community Care Network, February 2025, and associated data
- Veterans Health Administration, Memorandum on VHA Expenses, March 2025, and associated data
- First Amended Track 1 Trial Plaintiff Damages Assessment of Richard Sparks
- Social Security Administration, Data on cost-of-living adjustments at www.ssa.gov/cola/
- U.S. Department of Labor, Bureau of Labor Statistics: Consumer Price Index data at www.bls.gov/cpi/
- "United States Life Tables, 2021," *National Vital Statistics Reports*, Vol. 72, No. 12, November 2023

10. Author Information

My business name and address are:

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A handwritten signature in black ink that reads "Andrew C. Brod". The signature is written in a cursive, flowing style.

Appendix A

Sparks's VBA Offsets

Year	Age on 1/1	Annual	Present Value
2016	62	\$34,893	\$34,893
2017	63	\$38,180	\$38,180
2018	64	\$38,943	\$38,943
2019	65	\$40,034	\$40,034
2020	66	\$40,674	\$40,674
2021	67	\$41,203	\$41,203
2022	68	\$43,634	\$43,634
2023	69	\$47,430	\$47,430
2024	70	\$48,948	\$48,948
2025	71	\$50,172	\$50,172
2026	72	\$51,458	\$49,312
2027	73	\$52,776	\$48,468
2028	74	\$54,129	\$47,638
2029	75	\$55,516	\$46,822
2030	76	\$56,939	\$46,020
2031	77	\$58,398	\$45,232
2032	78	\$59,895	\$44,457
2033	79	\$61,430	\$43,696
2034	80	\$63,005	\$42,948
2035	81	\$64,619	\$42,212
2036	82	\$66,276	\$41,489
2037	83	\$67,974	\$40,779
	Total		\$963,186
	2016-24		\$373,940
	2025-37		\$589,246

Shahnasarian LCP

Lower Bound

Year	Age on 1/1	Aids Indep Living	Medications	Health & Strength	Wheel-chair Needs	Diagnostic Tests	Home Care, Nurse	Therapies, Other Med Pros	Architect Renovs
2025	71	\$0	\$827	\$0	\$0	\$529	\$0	\$4,541	\$0
2026	72	\$0	\$971	\$0	\$0	\$0	\$0	\$2,100	\$0
2027	73	\$0	\$951	\$0	\$0	\$0	\$5,161	\$2,042	\$0
2028	74	\$506	\$930	\$0	\$0	\$0	\$5,017	\$1,985	\$0
2029	75	\$736	\$910	\$0	\$0	\$0	\$4,878	\$1,930	\$267
2030	76	\$0	\$891	\$0	\$1,663	\$0	\$4,742	\$1,876	\$0
2031	77	\$0	\$872	\$0	\$574	\$0	\$4,610	\$1,824	\$0
2032	78	\$0	\$853	\$0	\$555	\$0	\$4,482	\$1,773	\$0
2033	79	\$0	\$835	\$0	\$536	\$0	\$4,357	\$1,724	\$0
2034	80	\$0	\$817	\$0	\$518	\$0	\$4,236	\$1,676	\$0
2035	81	\$398	\$799	\$0	\$501	\$0	\$4,118	\$1,629	\$0
2036	82	\$0	\$782	\$0	\$484	\$0	\$4,004	\$1,584	\$0
2037	83	\$0	\$765	\$0	\$467	\$0	\$3,893	\$1,540	\$0
		\$1,640	\$11,202	\$0	\$5,297	\$529	\$49,498	\$26,223	\$267

Year	Age on 1/1	Evals	Therapies, Physicians	Finance Mgmt	Home Care	Annual
2025	71	\$1,996	\$719	\$2,000	\$40,777	\$51,389
2026	72	\$253	\$554	\$0	\$48,527	\$52,405
2027	73	\$246	\$539	\$0	\$48,125	\$57,062
2028	74	\$239	\$524	\$0	\$47,726	\$56,927
2029	75	\$233	\$510	\$0	\$47,330	\$56,793
2030	76	\$227	\$496	\$0	\$46,938	\$56,832
2031	77	\$220	\$482	\$0	\$88,216	\$96,798
2032	78	\$214	\$469	\$0	\$87,485	\$95,831
2033	79	\$209	\$457	\$0	\$86,760	\$94,877
2034	80	\$203	\$444	\$0	\$86,041	\$93,935
2035	81	\$197	\$432	\$0	\$85,328	\$93,403
2036	82	\$192	\$420	\$0	\$84,621	\$92,087
2037	83	\$187	\$409	\$0	\$83,919	\$91,180
		\$4,617	\$6,455	\$2,000	\$881,791	\$989,519

Shahnasarian LCP

Upper Bound

Year	Age on 1/1	Aids Indep Living	Medications	Health & Strength	Wheel-chair Needs	Diagnostic Tests	Home Care, Nurse	Therapies, Other Med Pros	Architect Renovs
2025	71	\$0	\$4,197	\$0	\$0	\$980	\$0	\$8,368	\$0
2026	72	\$0	\$4,929	\$0	\$0	\$0	\$0	\$4,622	\$0
2027	73	\$0	\$4,823	\$0	\$0	\$0	\$7,372	\$4,493	\$0
2028	74	\$825	\$4,720	\$0	\$0	\$0	\$7,167	\$4,368	\$0
2029	75	\$3,983	\$4,618	\$0	\$1,877	\$0	\$6,968	\$4,247	\$356
2030	76	\$0	\$4,519	\$0	\$678	\$0	\$6,774	\$4,129	\$0
2031	77	\$303	\$4,422	\$0	\$656	\$0	\$6,586	\$4,014	\$0
2032	78	\$0	\$4,327	\$0	\$633	\$0	\$6,403	\$3,902	\$0
2033	79	\$978	\$4,235	\$0	\$612	\$0	\$6,225	\$3,794	\$0
2034	80	\$0	\$4,144	\$0	\$592	\$0	\$6,052	\$3,688	\$0
2035	81	\$264	\$4,055	\$0	\$572	\$0	\$5,883	\$3,586	\$0
2036	82	\$0	\$3,968	\$0	\$552	\$0	\$5,720	\$3,486	\$0
2037	83	\$247	\$3,883	\$0	\$534	\$0	\$5,561	\$3,389	\$0
		\$6,600	\$56,840	\$0	\$6,706	\$980	\$70,711	\$56,085	\$356

Year	Age on 1/1	Evals	Therapies, Physicians	Finance Mgmt	Home Care	Annual
2025	71	\$3,518	\$1,440	\$2,000	\$53,594	\$74,097
2026	72	\$471	\$1,177	\$0	\$63,780	\$74,979
2027	73	\$458	\$1,145	\$0	\$63,251	\$81,543
2028	74	\$446	\$1,114	\$0	\$62,727	\$81,367
2029	75	\$434	\$1,084	\$0	\$62,207	\$85,776
2030	76	\$422	\$1,054	\$0	\$114,211	\$131,788
2031	77	\$411	\$1,026	\$0	\$113,264	\$130,681
2032	78	\$399	\$998	\$0	\$112,325	\$128,989
2033	79	\$389	\$971	\$0	\$111,395	\$128,597
2034	80	\$378	\$944	\$0	\$110,472	\$126,269
2035	81	\$368	\$919	\$0	\$109,556	\$125,202
2036	82	\$358	\$894	\$0	\$108,648	\$123,626
2037	83	\$348	\$870	\$0	\$107,748	\$122,579
		\$8,399	\$13,636	\$2,000	\$1,193,178	\$1,415,493

Shahnasarian LCP, Modified by Miller / MEDICARE

Lower Bound

Year	Age on 1/1	Aids Indep Living	Medications	Health & Strength	Wheel-chair Needs	Diagnostic Tests	Home Care, Nurse	Therapies, Other Med Pros	Architect Renovs
2025	71	\$0	\$1,337	\$0	\$0	\$197	\$0	\$2,160	\$0
2026	72	\$0	\$1,570	\$0	\$0	\$0	\$0	\$1,105	\$0
2027	73	\$0	\$1,536	\$0	\$0	\$0	\$11,369	\$1,074	\$0
2028	74	\$372	\$1,503	\$0	\$0	\$0	\$11,053	\$1,044	\$0
2029	75	\$1,625	\$1,471	\$0	\$0	\$0	\$10,746	\$1,015	\$0
2030	76	\$0	\$1,439	\$0	\$5,216	\$0	\$10,447	\$987	\$0
2031	77	\$0	\$1,408	\$0	\$0	\$0	\$10,156	\$959	\$0
2032	78	\$0	\$1,378	\$0	\$0	\$0	\$9,874	\$933	\$0
2033	79	\$0	\$1,349	\$0	\$0	\$0	\$9,599	\$907	\$0
2034	80	\$0	\$1,320	\$0	\$0	\$0	\$9,333	\$882	\$0
2035	81	\$293	\$1,291	\$0	\$0	\$0	\$9,073	\$857	\$0
2036	82	\$0	\$1,264	\$0	\$0	\$0	\$8,821	\$833	\$0
2037	83	\$0	\$1,237	\$0	\$0	\$0	\$8,576	\$810	\$0
		\$2,289	\$18,103	\$0	\$5,216	\$197	\$109,046	\$13,564	\$0

Year	Age on 1/1	Evals	Therapies, Physicians	Finance Mgmt	Home Care	Annual
2025	71	\$798	\$278	\$0	\$67,963	\$72,733
2026	72	\$159	\$199	\$0	\$80,880	\$83,912
2027	73	\$155	\$194	\$0	\$80,209	\$94,537
2028	74	\$150	\$188	\$0	\$79,545	\$93,855
2029	75	\$146	\$183	\$0	\$78,886	\$94,072
2030	76	\$142	\$178	\$0	\$78,232	\$96,641
2031	77	\$138	\$174	\$0	\$99,477	\$112,313
2032	78	\$135	\$169	\$0	\$98,653	\$111,141
2033	79	\$131	\$164	\$0	\$97,835	\$109,985
2034	80	\$127	\$160	\$0	\$97,024	\$108,845
2035	81	\$124	\$155	\$0	\$96,220	\$108,014
2036	82	\$121	\$151	\$0	\$95,423	\$106,612
2037	83	\$117	\$147	\$0	\$94,632	\$105,519
		\$2,444	\$2,341	\$0	\$1,144,979	\$1,298,179

Shahnasarian LCP, Modified by Miller / MEDICARE

Upper Bound

Year	Age on 1/1	Aids Indep Living	Medications	Health & Strength	Wheel-chair Needs	Diagnostic Tests	Home Care, Nurse	Therapies, Other Med Pros	Architect Renovs
2025	71	\$0	\$1,337	\$0	\$0	\$197	\$0	\$2,444	\$0
2026	72	\$0	\$1,570	\$0	\$0	\$0	\$0	\$1,381	\$0
2027	73	\$0	\$1,536	\$0	\$0	\$0	\$11,369	\$1,342	\$0
2028	74	\$372	\$1,503	\$0	\$0	\$0	\$11,053	\$1,305	\$0
2029	75	\$3,010	\$1,471	\$0	\$5,398	\$0	\$10,746	\$1,269	\$0
2030	76	\$0	\$1,439	\$0	\$0	\$0	\$10,447	\$1,233	\$0
2031	77	\$65	\$1,408	\$0	\$0	\$0	\$10,156	\$1,199	\$0
2032	78	\$0	\$1,378	\$0	\$0	\$0	\$9,874	\$1,166	\$0
2033	79	\$374	\$1,349	\$0	\$0	\$0	\$9,599	\$1,133	\$0
2034	80	\$0	\$1,320	\$0	\$0	\$0	\$9,333	\$1,102	\$0
2035	81	\$57	\$1,291	\$0	\$0	\$0	\$9,073	\$1,071	\$0
2036	82	\$0	\$1,264	\$0	\$0	\$0	\$8,821	\$1,041	\$0
2037	83	\$53	\$1,237	\$0	\$0	\$0	\$8,576	\$1,012	\$0
		\$3,931	\$18,103	\$0	\$5,398	\$197	\$109,046	\$16,700	\$0

Year	Age on 1/1	Eval	Therapies, Physicians	Finance Mgmt	Home Care	Annual
2025	71	\$798	\$278	\$0	\$67,963	\$73,017
2026	72	\$159	\$199	\$0	\$80,880	\$84,188
2027	73	\$155	\$194	\$0	\$80,209	\$94,805
2028	74	\$150	\$188	\$0	\$79,545	\$94,116
2029	75	\$146	\$183	\$0	\$78,886	\$101,108
2030	76	\$142	\$178	\$0	\$100,308	\$113,748
2031	77	\$138	\$174	\$0	\$99,477	\$112,618
2032	78	\$135	\$169	\$0	\$98,653	\$111,374
2033	79	\$131	\$164	\$0	\$97,835	\$110,586
2034	80	\$127	\$160	\$0	\$97,024	\$109,066
2035	81	\$124	\$155	\$0	\$96,220	\$107,992
2036	82	\$121	\$151	\$0	\$95,423	\$106,821
2037	83	\$117	\$147	\$0	\$94,632	\$105,774
		\$2,444	\$2,341	\$0	\$1,167,055	\$1,325,214

Shahnasarian LCP, Modified by Miller / VHA

Lower Bound

Year	Age on 1/1	Aids Indep Living	Medications	Health & Strength	Wheel-chair Needs	Diagnostic Tests	Home Care, Nurse	Therapies, Other Med Pros	Architect Renovs
2025	71	\$0	\$0	\$0	\$0	\$247	\$0	\$2,700	\$0
2026	72	\$0	\$0	\$0	\$0	\$0	\$0	\$1,381	\$0
2027	73	\$0	\$0	\$0	\$0	\$0	\$11,369	\$1,342	\$0
2028	74	\$465	\$0	\$0	\$0	\$0	\$11,053	\$1,305	\$0
2029	75	\$2,031	\$0	\$0	\$0	\$0	\$10,746	\$1,269	\$89
2030	76	\$0	\$0	\$0	\$6,520	\$0	\$10,447	\$1,234	\$0
2031	77	\$0	\$0	\$0	\$0	\$0	\$10,156	\$1,199	\$0
2032	78	\$0	\$0	\$0	\$0	\$0	\$9,874	\$1,166	\$0
2033	79	\$0	\$0	\$0	\$0	\$0	\$9,599	\$1,133	\$0
2034	80	\$0	\$0	\$0	\$0	\$0	\$9,333	\$1,102	\$0
2035	81	\$366	\$0	\$0	\$0	\$0	\$9,073	\$1,071	\$0
2036	82	\$0	\$0	\$0	\$0	\$0	\$8,821	\$1,042	\$0
2037	83	\$0	\$0	\$0	\$0	\$0	\$8,576	\$1,013	\$0
		\$2,861	\$0	\$0	\$6,520	\$247	\$109,046	\$16,957	\$89

Year	Age on 1/1	Evals	Therapies, Physicians	Finance Mgmt	Home Care	Annual
2025	71	\$998	\$399	\$0	\$67,963	\$72,307
2026	72	\$199	\$300	\$0	\$80,880	\$82,759
2027	73	\$193	\$292	\$0	\$80,209	\$93,406
2028	74	\$188	\$284	\$0	\$79,545	\$92,839
2029	75	\$183	\$276	\$0	\$78,886	\$93,479
2030	76	\$178	\$268	\$0	\$78,232	\$96,879
2031	77	\$173	\$261	\$0	\$155,167	\$166,957
2032	78	\$168	\$254	\$0	\$153,881	\$165,344
2033	79	\$164	\$247	\$0	\$152,606	\$163,750
2034	80	\$159	\$240	\$0	\$151,341	\$162,176
2035	81	\$155	\$234	\$0	\$150,087	\$160,986
2036	82	\$151	\$228	\$0	\$148,843	\$159,084
2037	83	\$147	\$221	\$0	\$147,610	\$157,566
		\$3,055	\$3,505	\$0	\$1,525,251	\$1,667,530

Shahnasarian LCP, Modified by Miller / VHA

Upper Bound

Year	Age on 1/1	Aids Indep Living	Medications	Health & Strength	Wheel-chair Needs	Diagnostic Tests	Home Care, Nurse	Therapies, Other Med Pros	Architect Renovs
2025	71	\$0	\$0	\$0	\$0	\$247	\$0	\$3,055	\$0
2026	72	\$0	\$0	\$0	\$0	\$0	\$0	\$1,726	\$0
2027	73	\$0	\$0	\$0	\$0	\$0	\$11,369	\$1,678	\$0
2028	74	\$465	\$0	\$0	\$0	\$0	\$11,053	\$1,631	\$0
2029	75	\$3,762	\$0	\$0	\$6,747	\$0	\$10,746	\$1,586	\$89
2030	76	\$0	\$0	\$0	\$0	\$0	\$10,447	\$1,542	\$0
2031	77	\$82	\$0	\$0	\$0	\$0	\$10,156	\$1,499	\$0
2032	78	\$0	\$0	\$0	\$0	\$0	\$9,874	\$1,457	\$0
2033	79	\$468	\$0	\$0	\$0	\$0	\$9,599	\$1,417	\$0
2034	80	\$0	\$0	\$0	\$0	\$0	\$9,333	\$1,377	\$0
2035	81	\$71	\$0	\$0	\$0	\$0	\$9,073	\$1,339	\$0
2036	82	\$0	\$0	\$0	\$0	\$0	\$8,821	\$1,302	\$0
2037	83	\$66	\$0	\$0	\$0	\$0	\$8,576	\$1,266	\$0
		\$4,914	\$0	\$0	\$6,747	\$247	\$109,046	\$20,876	\$89

Year	Age on 1/1	Evals	Therapies, Physicians	Finance Mgmt	Home Care	Annual
2025	71	\$998	\$399	\$0	\$67,963	\$72,662
2026	72	\$199	\$300	\$0	\$80,880	\$83,104
2027	73	\$193	\$292	\$0	\$80,209	\$93,741
2028	74	\$188	\$284	\$0	\$79,545	\$93,165
2029	75	\$183	\$276	\$0	\$78,886	\$102,274
2030	76	\$178	\$268	\$0	\$156,464	\$168,899
2031	77	\$173	\$261	\$0	\$155,167	\$167,338
2032	78	\$168	\$254	\$0	\$153,881	\$165,635
2033	79	\$164	\$247	\$0	\$152,606	\$164,501
2034	80	\$159	\$240	\$0	\$151,341	\$162,451
2035	81	\$155	\$234	\$0	\$150,087	\$160,960
2036	82	\$151	\$228	\$0	\$148,843	\$159,344
2037	83	\$147	\$221	\$0	\$147,610	\$157,886
		\$3,055	\$3,505	\$0	\$1,603,483	\$1,751,961

Fryar LCP, Modified by Miller / MEDICARE

Lower Bound

Year	Age on 1/1	Equipment	Medications	Health & Strength	Therapies, Other Med Pros	Diagnostic Tests	Home Care	Facility Care	Home Care, Nurse
2025	71	\$2,275	\$1,331	\$0	\$9,033	\$371	\$81,556	\$0	\$0
2026	72	\$0	\$1,563	\$0	\$987	\$0	\$80,880	\$0	\$0
2027	73	\$7,648	\$1,529	\$0	\$959	\$0	\$80,209	\$0	\$11,369
2028	74	\$0	\$1,496	\$0	\$933	\$0	\$79,545	\$0	\$11,053
2029	75	\$359	\$1,464	\$0	\$0	\$0	\$0	\$39,222	\$0
2030	76	\$0	\$1,433	\$0	\$0	\$0	\$0	\$0	\$0
2031	77	\$335	\$1,402	\$0	\$0	\$0	\$0	\$0	\$0
2032	78	\$0	\$1,372	\$0	\$0	\$0	\$0	\$0	\$0
2033	79	\$313	\$1,343	\$0	\$0	\$0	\$0	\$0	\$0
2034	80	\$0	\$1,314	\$0	\$0	\$0	\$0	\$0	\$0
2035	81	\$293	\$1,286	\$0	\$0	\$0	\$0	\$0	\$0
2036	82	\$0	\$1,258	\$0	\$0	\$0	\$0	\$0	\$0
2037	83	\$273	\$1,231	\$0	\$0	\$0	\$0	\$0	\$0
		\$11,497	\$18,021	\$0	\$11,912	\$371	\$322,190	\$39,222	\$22,422

Year	Age on 1/1	Home Mods	Evals	Therapies, Physicians	Finance Mgmt	Support Services	Annual
2025	71	\$0	\$1,246	\$263	\$0	\$0	\$96,074
2026	72	\$0	\$610	\$170	\$0	\$0	\$84,210
2027	73	\$0	\$594	\$166	\$0	\$0	\$102,474
2028	74	\$0	\$578	\$161	\$0	\$0	\$93,766
2029	75	\$0	\$0	\$0	\$0	\$0	\$41,045
2030	76	\$0	\$0	\$0	\$0	\$0	\$1,433
2031	77	\$0	\$0	\$0	\$0	\$0	\$1,738
2032	78	\$0	\$0	\$0	\$0	\$0	\$1,372
2033	79	\$0	\$0	\$0	\$0	\$0	\$1,656
2034	80	\$0	\$0	\$0	\$0	\$0	\$1,314
2035	81	\$0	\$0	\$0	\$0	\$0	\$1,578
2036	82	\$0	\$0	\$0	\$0	\$0	\$1,258
2037	83	\$0	\$0	\$0	\$0	\$0	\$1,504
		\$0	\$3,028	\$760	\$0	\$0	\$429,422

Fryar LCP, Modified by Miller / MEDICARE

Upper Bound

Year	Age on 1/1	Equipment	Medications	Health & Strength	Therapies, Other Med Pros	Diagnostic Tests	Home Care	Facility Care	Home Care, Nurse
2025	71	\$2,275	\$1,331	\$0	\$9,033	\$464	\$81,556	\$0	\$0
2026	72	\$0	\$1,563	\$0	\$987	\$0	\$80,880	\$0	\$0
2027	73	\$7,648	\$1,529	\$0	\$959	\$0	\$80,209	\$0	\$11,369
2028	74	\$0	\$1,496	\$0	\$933	\$0	\$79,545	\$0	\$11,053
2029	75	\$359	\$1,464	\$0	\$0	\$0	\$0	\$39,222	\$0
2030	76	\$0	\$1,433	\$0	\$0	\$0	\$0	\$0	\$0
2031	77	\$335	\$1,402	\$0	\$0	\$0	\$0	\$0	\$0
2032	78	\$0	\$1,372	\$0	\$0	\$0	\$0	\$0	\$0
2033	79	\$313	\$1,343	\$0	\$0	\$0	\$0	\$0	\$0
2034	80	\$0	\$1,314	\$0	\$0	\$0	\$0	\$0	\$0
2035	81	\$293	\$1,286	\$0	\$0	\$0	\$0	\$0	\$0
2036	82	\$0	\$1,258	\$0	\$0	\$0	\$0	\$0	\$0
2037	83	\$273	\$1,231	\$0	\$0	\$0	\$0	\$0	\$0
		\$11,497	\$18,021	\$0	\$11,912	\$464	\$322,190	\$39,222	\$22,422

Year	Age on 1/1	Home Mods	Evals	Therapies, Physicians	Finance Mgmt	Support Services	Annual
2025	71	\$0	\$1,308	\$438	\$0	\$0	\$96,404
2026	72	\$0	\$610	\$341	\$0	\$0	\$84,380
2027	73	\$0	\$594	\$332	\$0	\$0	\$102,640
2028	74	\$0	\$578	\$323	\$0	\$0	\$93,927
2029	75	\$0	\$0	\$0	\$0	\$0	\$41,045
2030	76	\$0	\$0	\$0	\$0	\$0	\$1,433
2031	77	\$0	\$0	\$0	\$0	\$0	\$1,738
2032	78	\$0	\$0	\$0	\$0	\$0	\$1,372
2033	79	\$0	\$0	\$0	\$0	\$0	\$1,656
2034	80	\$0	\$0	\$0	\$0	\$0	\$1,314
2035	81	\$0	\$0	\$0	\$0	\$0	\$1,578
2036	82	\$0	\$0	\$0	\$0	\$0	\$1,258
2037	83	\$0	\$0	\$0	\$0	\$0	\$1,504
		\$0	\$3,090	\$1,433	\$0	\$0	\$430,249

Fryar LCP, Modified by Miller / VHA

Lower Bound

Year	Age on 1/1	Equipment	Medications	Health & Strength	Therapies, Other Med Pros	Diagnostic Tests	Home Care	Facility Care	Home Care, Nurse
2025	71	\$2,844	\$0	\$0	\$11,292	\$464	\$81,556	\$0	\$0
2026	72	\$0	\$0	\$0	\$1,234	\$0	\$80,880	\$0	\$0
2027	73	\$9,560	\$0	\$0	\$1,199	\$0	\$80,209	\$0	\$11,369
2028	74	\$0	\$0	\$0	\$1,166	\$0	\$79,545	\$0	\$11,053
2029	75	\$449	\$0	\$0	\$0	\$0	\$0	\$153,236	\$0
2030	76	\$0	\$0	\$0	\$0	\$0	\$0	\$146,343	\$0
2031	77	\$419	\$0	\$0	\$0	\$0	\$0	\$145,302	\$0
2032	78	\$0	\$0	\$0	\$0	\$0	\$0	\$144,269	\$0
2033	79	\$392	\$0	\$0	\$0	\$0	\$0	\$143,243	\$0
2034	80	\$0	\$0	\$0	\$0	\$0	\$0	\$142,224	\$0
2035	81	\$366	\$0	\$0	\$0	\$0	\$0	\$141,212	\$0
2036	82	\$0	\$0	\$0	\$0	\$0	\$0	\$140,207	\$0
2037	83	\$341	\$0	\$0	\$0	\$0	\$0	\$139,210	\$0
		\$14,371	\$0	\$0	\$14,890	\$464	\$322,190	\$1,295,246	\$22,422

Year	Age on 1/1	Home Mods	Evals	Therapies, Physicians	Finance Mgmt	Support Services	Annual
2025	71	\$6,800	\$1,558	\$381	\$0	\$0	\$104,893
2026	72	\$0	\$763	\$264	\$0	\$0	\$83,140
2027	73	\$0	\$742	\$257	\$0	\$0	\$103,337
2028	74	\$0	\$722	\$250	\$0	\$0	\$92,736
2029	75	\$0	\$0	\$47	\$0	\$0	\$153,732
2030	76	\$0	\$0	\$46	\$0	\$0	\$146,389
2031	77	\$0	\$0	\$44	\$0	\$0	\$145,766
2032	78	\$0	\$0	\$43	\$0	\$0	\$144,312
2033	79	\$0	\$0	\$42	\$0	\$0	\$143,676
2034	80	\$0	\$0	\$41	\$0	\$0	\$142,264
2035	81	\$0	\$0	\$40	\$0	\$0	\$141,617
2036	82	\$0	\$0	\$39	\$0	\$0	\$140,246
2037	83	\$0	\$0	\$38	\$0	\$0	\$139,589
		\$6,800	\$3,785	\$1,529	\$0	\$0	\$1,681,698

Fryar LCP, Modified by Miller / VHA

Upper Bound

Year	Age on 1/1	Equipment	Medications	Health & Strength	Therapies, Other Med Pros	Diagnostic Tests	Home Care	Facility Care	Home Care, Nurse
2025	71	\$2,844	\$0	\$0	\$11,292	\$580	\$81,556	\$0	\$0
2026	72	\$0	\$0	\$0	\$1,234	\$0	\$80,880	\$0	\$0
2027	73	\$9,560	\$0	\$0	\$1,199	\$0	\$80,209	\$0	\$11,369
2028	74	\$0	\$0	\$0	\$1,166	\$0	\$79,545	\$0	\$11,053
2029	75	\$449	\$0	\$0	\$0	\$0	\$0	\$153,236	\$0
2030	76	\$0	\$0	\$0	\$0	\$0	\$0	\$146,343	\$0
2031	77	\$419	\$0	\$0	\$0	\$0	\$0	\$145,302	\$0
2032	78	\$0	\$0	\$0	\$0	\$0	\$0	\$144,269	\$0
2033	79	\$392	\$0	\$0	\$0	\$0	\$0	\$143,243	\$0
2034	80	\$0	\$0	\$0	\$0	\$0	\$0	\$142,224	\$0
2035	81	\$366	\$0	\$0	\$0	\$0	\$0	\$141,212	\$0
2036	82	\$0	\$0	\$0	\$0	\$0	\$0	\$140,207	\$0
2037	83	\$341	\$0	\$0	\$0	\$0	\$0	\$139,210	\$0
		\$14,371	\$0	\$0	\$14,890	\$580	\$322,190	\$1,295,246	\$22,422

Year	Age on 1/1	Home Mods	Evals	Therapies, Physicians	Finance Mgmt	Support Services	Annual
2025	71	\$6,800	\$1,634	\$600	\$0	\$0	\$105,305
2026	72	\$0	\$763	\$477	\$0	\$0	\$83,353
2027	73	\$0	\$742	\$464	\$0	\$0	\$103,544
2028	74	\$0	\$722	\$451	\$0	\$0	\$92,937
2029	75	\$0	\$0	\$47	\$0	\$0	\$153,732
2030	76	\$0	\$0	\$46	\$0	\$0	\$146,389
2031	77	\$0	\$0	\$44	\$0	\$0	\$145,766
2032	78	\$0	\$0	\$43	\$0	\$0	\$144,312
2033	79	\$0	\$0	\$42	\$0	\$0	\$143,676
2034	80	\$0	\$0	\$41	\$0	\$0	\$142,264
2035	81	\$0	\$0	\$40	\$0	\$0	\$141,617
2036	82	\$0	\$0	\$39	\$0	\$0	\$140,246
2037	83	\$0	\$0	\$38	\$0	\$0	\$139,589
		\$6,800	\$3,862	\$2,370	\$0	\$0	\$1,682,731

Appendix B

ANDREW C. BROD

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EDUCATION

1992: Ph.D. in Economics, University of Minnesota.
1985: M.A. in Economics, University of Minnesota.
1981: A.B. in Economics and Mathematics, University of Illinois.
Phi Beta Kappa, Cum Laude, and Distinction in Economics.

PROFESSIONAL EXPERIENCE

1997–present: President, Brod Forensic Economics
2010–present: Senior Research Fellow, Bryan School of Business and Economics, University of North Carolina at Greensboro.
1999–2010: Director, Center for Business and Economic Research, Bryan School of Business and Economics, University of North Carolina at Greensboro.
1989–99: Instructor and Assistant Professor, Department of Economics, University of North Carolina at Greensboro.
1988–89: Research Associate, University of Minnesota.
1986–88: Research Associate, Center for Health Policy Research, American Medical Association, Chicago, Illinois.
1981–85: Teaching Associate and Research Assistant, University of Minnesota.

RECENT APPLIED RESEARCH STUDIES

“Triad Business Census 2023,” for Triad Business Bank, February 2023
“Triad Business Census 2021,” for Triad Business Bank, May 2021
“Economic Impact of ‘60-by-30’,” for Community Foundation of Greater Greensboro, February 2020
“Assessing In-State Tuition for DACA Recipients,” for Community Foundation of Greater Greensboro, December 2019
“Triad Business Census 2019,” a feasibility study for TBB Organization, April 2019
“Economic Impact of the Proposed Lehigh Hanson Distribution Yard,” for Lehigh Hanson, Inc., August 2018.
“Valuation of Loflin Concrete and Related Entities,” for Loflin Concrete Company, Inc., August 2018.

“Assessment of Studies of House Values Near Rock Quarries,” for Lehigh Hanson, Inc., October 2017.

“Economic Impact of the Proposed Lehigh Hanson Quarry,” for Lehigh Hanson, Inc., October 2017.

“North Carolina Sales Tax Model,” for the North Carolina Economic Modeling Project, August 2017.

“Bee Safe Feasibility Study,” for The Carroll Companies, August 2016.

“Canada in the North Carolina Economy,” for the Department of Foreign Affairs, Trade and Development, Government of Canada, March 2016.

“The Economic Impact of the Greensboro Fire Department,” for the City of Greensboro, December 2015.

“Cityfi: Citywide Public Wi-Fi,” with Roch Smith, Jr., for the City of Greensboro’s Strong Cities, Strong Communities Challenge, June 2015.

“Assessing the North Carolina Film Tax Credit,” for Winston-Salem Business, Inc., May 2015.

“North Carolina Urban/Suburban Poverty,” for the City of Greensboro, September 2014.

“The Economic Impact of the Fuquay-Varina Cultural Arts Center,” for the FV Arts Foundation, September 2014.

“Macroeconomic Assessment of North Carolina’s Triad Region,” for Kisco Senior Living, August 2013.

“The Economic Impact of Improvements to Highway 17,” subcontract to Atkins Global, for the Highway 17 Association, February 2013.

“The History of Norfolk State University,” subcontract to Jack Faucett Associates, for the Economic Impact of Norfolk State University, Norfolk State University, December 2012.

“Analysis of Hendersonville, TN, Apartment Market,” for The Carroll Companies, May 2012.

“The Economic Impact of the Whitaker Park Development,” for Winston-Salem Business, Inc., June 2011.

“The Economic Impact of RAFI-USA’s Tobacco Communities Reinvestment Fund,” for the Rural Advancement Foundation International-USA, May 2011.

“A GIS Chartbook: RAFI-USA’s Tobacco Communities Reinvestment Fund,” with Bradley Bereitschaft, for the Rural Advancement Foundation International-USA, May 2011.

“Demographic and Economic Projections: North Carolina in 2040,” subcontract to PBS&J, for the North Carolina Statewide Transportation Plan, North Carolina Department of Transportation, March 2011.

“The Economic Impact of the Proposed National Banjo Center,” for Piedmont Folk Legacies, June 2010.

“The Economic Impact of UNCG’s Proposed School of Pharmacy,” for The University of North Carolina at Greensboro, April 2010.

“State Wine Regulations,” for The North Carolina Wine and Grape Council, April 2010.

“The Economic Impact of the Natural Science Center of Greensboro,” for the Natural Science Center of Greensboro, February 2009.

“An Economic Analysis of Case Management in Guilford County,” with Christopher Ruhm, for the Moses Cone Wesley Long Community Health Foundation, November 2008.

“Economic and Demographic Projections: North Carolina in 2020 and 2030,” subcontract to North Carolina State University’s Institute for Transportation Research and Education, for the NC Logistics Plan, North Carolina Office of State Budget and Management, April 2008.

“Guilford County’s Retail ‘Exports’,” for the Greensboro Merchants Association, April 2008.

RECENT NEWSPAPER AND MAGAZINE ARTICLES

“Lost Household Services in Lost Wages Projections,” *Triangle Attorney at Law*, January 2025

“Life-Care Plans and the Forensic Economist,” *Triangle Attorney at Law*, September 2024

“What For? The But-For Scenario,” *Triangle Attorney at Law*, June 2024

“Wrongful Death Cases Can Be Tricky,” *Triangle Attorney at Law*, February 2024

“Could ChatGPT Be Your Next Expert Witness?,” *Triangle Attorney at Law*, August 2023

“Covid-19, Life Expectancy, and Economic Damages,” *Triangle Attorney at Law*, February 2023

“Hedonic Damages in Civil Litigation,” *Triangle Attorney at Law*, October 2022

“Daubert Challenges from an Economist’s Perspective,” *Triangle Attorney at Law*, June 2022

“Lost Profit in Business Litigation,” *Triangle Attorney at Law*, February 2022

“Boom Supersonic Takes Flight,” *Greensboro News & Record*, January 30, 2022

“What the Pandemic Did to Your Business and My Business,” *Triangle Attorney at Law*, October 2021

“Economic Damages Playing Bigger Role in Med-Mal Cases,” *Triangle Attorney at Law*, May 2021

“A Decade of Interesting Economic Policy in N.C.,” *Triad Business Journal*, January 17, 2020

“When Giving, Remember the Cost of Unintended Consequences,” *Triad Business Journal*, December 6, 2019

“Trump in a Landslide?,” *Triad Business Journal*, October 25, 2019

“Don’t Oversell the Creative Economy,” *Triad Business Journal*, October 4, 2019

“Recessions – Remember Them?,” *Triad Business Journal*, September 6, 2019

“State Health Plan: A Game of Chicken?,” *Triad Business Journal*, August 2, 2019

“Let’s Dive Into the Triad’s Payroll Puzzle,” *Triad Business Journal*, May 31, 2019

“Treading Water: It’s Worse Than I Thought,” *Triad Business Journal*, April 26, 2019

“The Life Cycle in Forensic Economics,” *Triangle Attorney at Law Magazine*, April 2019

“The Yield Curve Inverted! The Yield Curve Inverted!,” *Triad Business Journal*, March 29, 2019

“Democratic Socialism or Social Democracy?,” *Triad Business Journal*, March 1, 2019

“NFL Drug Testing and the Sexes of Grandchildren,” *Triad Business Journal*, December 28, 2018

“Flipping the Bird at Pedestrians in the Triad?,” *Triad Business Journal*, November 30, 2018

“Trump, Media Confused on ‘Time Value of Money’,” *Triad Business Journal*, October 26, 2018

“Reflecting on Triad Workforce, 20 Years Later,” *Triad Business Journal*, September 14, 2018

“Medicare For All: Too Costly or Worth the Risk?,” *Triad Business Journal*, August 30, 2018

“The Economic Outlook: Rosy, Gloomy, or Iffy?,” *Triad Business Journal*, August 3, 2018

“If Labor is Scarce, Why Aren’t Wages Rising More?,” *Triad Business Journal*, June 29, 2018

“Are Rising Gasoline Prices an Omen of Recession?,” *Triad Business Journal*, June 1, 2018

“Medicaid Expansion: It’s Still Not Too Late for North Carolina,” *Triad Business Journal*, March 30, 2018

“Can We Really Win a Trade War?,” *Triad Business Journal*, March 9, 2018

“Loss of Auto Plant Hurts Even More the Second Time,” *Triad Business Journal*, January 26, 2018

“Here’s What the Triad Should Be Watching in 2018,” *Triad Business Journal*, January 5, 2018

“Can Greensboro-High Point's land Amazon's HQ2?,” *Triad Business Journal*, November 24, 2017

“Police Pursuits and the Value of a Statistical Life,” *Triad Business Journal*, October 27, 2017

“Celebrate Labor Day by Debunking Workforce Myths,” *Triad Business Journal*, September 1, 2017

“The Occasionally Curious World of Forensic Economics,” *Triangle Attorney at Law Magazine*, September 2017

“A Tale of Two, or Perhaps Five, North Carolinas,” *Triad Business Journal*, July 28, 2017

“Cutting Retiree Health Benefits is Penny-Wise and Pound-Foolish,” *Triad Business Journal*, June 30, 2017

“Public Cruelty as Economic Policy,” *Triad Business Journal*, May 26, 2017

“Auctions in the Air,” *Triad Business Journal*, April 28, 2017

“HB2 Means Slower Growth for North Carolina,” *Triad Business Journal*, March 31, 2017

“U.S. Labor Markets are Returning to (Almost) Normal,” *Triad Business Journal*, February 24, 2017

“Will U.S. Economy Suffer from a Trump Recession?,” *Triad Business Journal*, January 27, 2017

“Why is HB2 Still with Us? It's the Urban/Rural Divide,” *Triad Business Journal*, January 13, 2017

“Can President Trump Bring Back Manufacturing Jobs?,” *Triad Business Journal*, December 2, 2016

“This Year, the Economy Favors Neither Candidate,” *Triad Business Journal*, October 28, 2016

“North Carolina is Suffering from Self-Inflicted Wounds,” *Triad Business Journal*, October 24, 2016

RECENT PUBLIC PRESENTATIONS

“Writing Opinion Columns”: UNCG Young Writers’ Camp, 7/14/23 and 7/12/19

“Brief Economic Update”: Summit Rotary Club, 6/2/23; Institute of Management Accountants, Triad Chapter, 10/18/18; Edward R. Murrow Kiwanis, 8/14/18; Temple Emanuel, 11/1/17; Gate City Rotary Club, 8/17/17; Greensboro Kiwanis Club, 1/12/17; Institute of Management Accountants, Triad Chapter, 10/20/16; Crescent Rotary Club, 10/10/16.

“Coronavirus Economics”: Temple Emanuel, 7/29/20; Gate City Rotary Club, 5/14/20.

“‘60 by 30’: The Impact of Educational Attainment in Guilford County”: Community Foundation of Greater Greensboro, 5/22/20 and 2/25/20.

“U.S./North Carolina Economic Update”: Piedmont Triad Apartment Association, 1/17/20; Society of Financial Service Professionals, 2/20/18; Alamance Community College Foundation, 9/17/17; Society of Financial Service Professionals, 1/17/17; Bernard Robinson & Co., 10/25/16, 10/27/16; Society of Financial Service Professionals, 1/19/16.

“Forensic Economics”: UNCG chapter of National Association for Business Economics, 1/31/18.

“Economic Update for the U.S. and the Transportation Sector”: Transplace Southeast Carrier Symposium, 1/18/18, 11/10/16.

“Triad Economic Update/The Triad Business Index”: Moderate Chic Club, 8/25/16.

“The Economics of the Minimum Wage”: Southern Guilford Rotary Club, 7/19/16.

“Economic Implications of USPS Privatization”: Grand Alliance to Save our Public Postal Service, 6/29/16.

“The Economics of Immigration”: Holy Trinity Episcopal Church, 3/6/16.

ACADEMIC PUBLICATIONS

“Trends in Cooperative Research Activity: Has the National Cooperative Research Act Been Successful?” (with A. Link), in *Innovation Policy in the Knowledge-Based Economy* (edited by M. Feldman and A. Link), Kluwer Academic Publishers, 2001.

“Advantageous Semi-Collusion,” with Ram Shivakumar, *Journal of Industrial Economics*, June 1999.

“Migraine Preventive Medications: A Reappraisal,” with James Adelman, Randal Von Seggern, Lisa Mannix, and Alan Rapoport (2nd author), *Cephalalgia*, November 1998.

“Domestic versus International R&D Spillovers,” with Ram Shivakumar, *Economics Letters*, October 1997.

“R&D Cooperation and the Joint Exploitation of Cooperative R&D,” with Ram Shivakumar, *Canadian Journal of Economics*, August 1997.

“Economics as One of the Humanities: A Comment,” *Southern California Interdisciplinary Law Journal*, Winter 1995.

“Can Green Trade be Free Trade?,” *Global Perspectives*, Summer 1994.

RECENT PROFESSIONAL AND COMMUNITY SERVICE

2020–present: President, Finance Chair, and member of Board of Trustees, Temple Emanuel, Greensboro, NC

2006–20: Vice President, Campaign Chair, and member of Board of Trustees, Greensboro Jewish Federation.

2000–12: President, Vice President for Education, and member of Board of Trustees, Temple Emanuel, Greensboro, N.C.

2010–11: Member, Campaign Planning Committee, Community Theatre of Greensboro.

2006–2010: Faculty advisor, Hillel, The University of North Carolina at Greensboro.

2003–2005, 2006–2010: Vice President and member of Board of Directors, Association for University Business and Economic Research.

1999–2005: Member, Board of Directors, American Civil Liberties Union of North Carolina.

2001–02: Member, Action Greensboro task force on Attracting and Retaining Young Professionals.

2000–02: Member, Technical Advisory Team, City of Greensboro Comprehensive Plan, Greensboro, N.C.

1999–2000: Chair, Living-Wage Study Committee, City of Greensboro, N.C.

1999: Member, Citizen’s Advisory Board, Department of Storm Water Services, City of Greensboro, N.C.

Appendix C

Four-Year Testimony Log for Dr. Andrew Brod As of May 8, 2025

1. Estate of Guadalupe Vazquez-Alvarado v. Stellar HVAC LLC, et al
Damages expert for plaintiff's counsel, Riddle & Riddle LLP
Deposed: February 18, 2025
2. Sopheap Pang v. Wake Forest University Baptist Medical Center, et al
Damages expert for plaintiff's counsel, Law Offices of Gregory Kash
Deposed: January 31, 2025
3. Filomeno Orozco Vaquero v. Toll NC II LP, et al
Damages expert for plaintiff's counsel, Bricio Law Firm
Deposed: December 17, 2024
4. Aaron Casasola-Robles v. Ana T. Daley, R.N., et al
Damages expert for plaintiff's counsel, Mills & Mahoney, PA
Deposed: November 19, 2024
5. Clifford Hyatt v. North Carolina Farm Bureau Insurance, et al
Damages expert for plaintiff's counsel, Poisson, Poisson & Bower
Testified at arbitration hearing: November 6, 2024
6. Gregory Burgess v. United States of America
Damages expert for defendant's counsel, U.S. Department of Justice
Deposed: February 22, 2024
7. Rachelle Robinson-Ware v. Keenen Menefee-Long
Damages expert for plaintiff's counsel, Bullock, Clay & Furr, PLLC
Testified at trial: February 1, 2024
8. Jeffery Cambre v. Medical Imaging Center LLC, et al
Damages expert for plaintiff's counsel, Anderson, Johnson, Lawrence & Butler, LLP
Testified at trial: November 7, 2023
Deposed: May 3, 2023
9. Estate of Larry Toney v. Atrium Health, Inc., et al
Damages expert for plaintiff's counsel, Comerford, Chilson & Moser, LLP
Deposed: July 5, 2023
10. Estate of Worth Carter, Jr. v. Judith Szulecki, M.D.
Damages expert for plaintiff's counsel, Young, Haskins, Mann, Gregory & Wall, PC
Deposed: June 27, 2023

11. David Carmely v. United States of America
Damages expert for defendant's counsel, U.S. Department of Justice
Testified at trial: March 8, 2023
12. Estate of William Conti v. Jeremy Holdsworth, M.D., et al
Damages expert for plaintiff's counsel, Melvin Law Firm
Deposed: February 20, 2023
13. CIP Construction Company, et al v. Schindler Elevator Company
Damages expert for plaintiff's counsel, Rossabi Law Partners
Deposed: August 10, 2022
14. Donald Pearce v. Novant Medical Group, et al
Damages expert for plaintiff's counsel, Melvin Law Firm
Deposed: June 15, 2022
15. Lorraine Rusch v. High Point Clinical Trials Center LLC, et al
Damages expert for defendant's counsel, Rossabi Law Partners
Testified at trial: April 1, 2022
Deposed: December 22, 2021
16. April Williams v. North Carolina Baptist Hospital, et al
Damages expert for plaintiff's counsel, Melvin Law Firm
Deposed: March 10, 2022
17. Estate of Jennifer Huddle Edwards v. William Lindel, MD, et al
Damages expert for plaintiff's counsel, Gardner Barrow & Sharpe PC
Deposed: February 28, 2022
18. Cecil Staton v. Harry Smith, et al
Damages expert for defendant's counsel, Fox Rothschild LLP
Deposed: January 19, 2022
19. Estate of Kristopher Parks v. D Benton, Inc. et al
Damages expert for plaintiff's counsel, Riddle & Brantley
Deposed: December 14, 2021
20. Juanita Danzy v. Coloplast Corp. et al
Damages expert for plaintiff's counsel, Martin Baughman
Deposed: December 10, 2021
21. Estate of Justin Haggard v. Todd Ellis et al
Damages expert for plaintiff's counsel, Tatum Law Firm
Deposed: November 10, 2021
22. Joyce Hardison v. Wanda Goodson
Damages expert for plaintiff's counsel, Poisson, Poisson & Bower
Testified at trial: May 21, 2021