

January 17, 2018

Mr. R. Earl Lewis, Jr.
Deputy Secretary
Maryland Department of Transportation
7201 Corporate Center Drive
Hanover, MD 21076

Dear Deputy Secretary Lewis:

The 2017 Disparity Study, entitled *Business Disparities in the Maryland Market Area*, provides a comprehensive analysis of the participation of minority- and women-owned business enterprises in Maryland state contracting and in the geographic and product markets within which the State operates. In the final chapter of that Study, I wrote:

Maryland has a strong basis in evidence to implement a race- and gender-based program for contracting and procurement based upon the findings in this Study. This record establishes that minorities and women in the Maryland market area continue to experience statistically significant disparities in their access to State and private sector contracts and in those factors necessary for business success. Further, the anecdotal evidence provides vivid individual accounts of the discriminatory barriers, both overt and covert, to their full and fair participation in both State and private sector procurement and contracting expenditures. The statistical and anecdotal evidence presented in this Study is strong evidence that establishes Maryland's compelling interest in remedying race and gender discrimination. The evidence supports the conclusion that affirmative intervention is still needed to dismantle the exclusion of racial and gender groups from the private sector market. Maryland will likely be a passive participant in a discriminatory marketplace if it fails to continue to address the issue. Moreover, ... there remain large and statistically significant disparities between the availability of M/WBEs and their utilization on State contracts despite the State's aggressive current efforts. These results support the need for continued remedial action.¹

¹ NERA Economic Consulting, *Business Disparities in the Maryland Market Area* (February 8, 2017) ("the 2017 Disparity Study"), p. 322.

NERA submitted the 2017 Disparity Study to the Maryland Department of Transportation (“MDOT”) which, in turn, provided it to the Maryland General Assembly and posted it on the MDOT website.

As the Principal Investigator for the 2017 Disparity Study, I was asked by the State of Maryland to examine information regarding the major industry activities and ancillary industry activities that are likely to be involved in the medical cannabis business. Specifically, I was asked:

1. To examine data provided by the State for the medical cannabis business and determine whether the North American Industry Classification System (“NAICS”) codes relevant to the medical cannabis business are different in any consequential way from the NAICS codes included in NERA’s analysis of Maryland state contracting for the 2017 Disparity Study; and
2. To determine whether the 2017 Disparity Study provides an evidentiary basis for applying race- and/or gender-conscious remedial measures, including the State’s Minority Business Enterprise (“MBE”) Program, to the medical cannabis business.

I. Overview

As explained in more detail below, my analysis finds that:

1. The vast majority of NAICS codes associated with the major industry activities that are expected to be relevant to the medical cannabis business are included in the 2017 Disparity Study.
2. The vast majority of NAICS codes associated with the ancillary industry activities that are expected to be relevant to the medical cannabis business are included in the 2017 Disparity Study.
3. The vast majority of lifecycle spend associated with the major industry activities that are expected to be relevant to the medical cannabis business occurs in NAICS codes that are included in the 2017 Disparity Study.
4. A supplementary statistical analysis of wage and salary earnings, business owner earnings, and business formation covering the Maryland geographic market area and the NAICS codes associated with each of the three primary medical cannabis business license types (*i.e.* Growers, Processors, and Dispensaries) as well as for Independent Testing Labs, additionally confirms the presence of large, adverse, and statistically significant disparities affecting

African Americans, Hispanics, Asians, Native Americans, minorities as a group, nonminority females, and minorities and women as a group.

For these reasons, I conclude that the 2017 Disparity Study does provide a strong basis in evidence for applying race- and/or gender-conscious remedial measures, including the State's MBE Program, to the types of work involved in the medical cannabis business.

II. Findings

The State provided NERA with a report detailing the specific NAICS codes that are likely to be directly involved in the major activities of medical cannabis business, as well as estimates of the overall lifecycle spending attributable to each of those NAICS codes.² That report also identified ancillary NAICS codes that, although not tied to specific lifecycle spending amounts, were also expected to be involved in the medical cannabis business.³

Entitled *Analysis of the Maryland Medical Cannabis Industry*, the report was prepared by MGT Consulting Group, a national professional services provider. NERA was asked to examine the MGT Report regarding the major and ancillary industries that are anticipated to be involved in the medical cannabis business and make a determination as to whether the industry codes relevant to the medical cannabis business were different in any consequential way from the industry codes examined in NERA's analysis of Maryland state contracting for the 2017 Disparity Study and whether the 2017 Disparity Study could provide an evidentiary basis for the application of race- and/or gender-conscious remedial measures, including the State's MBE Program, to the types of work involved in the medical cannabis business.

I reviewed the NAICS codes in the MGT Report at both the "industry," or six-digit, level and the "industry group," or four-digit, level in order to provide the fullest picture possible of the types of firms involved in the medical cannabis business.

² MGT Consulting, *Analysis of the Maryland Medical Cannabis Industry* (December 8, 2017) ("the MGT Report").

³ *Id.*, pp. 26, 40-43.

A. Correspondence by Six-Digit NAICS Code Between the Major Industry Activities in the MGT Report and the 2017 Disparity Study

The MGT Report identified 109 six-digit NAICS codes that are relevant to the major activities of the medical cannabis business.⁴ Of these:

- 95 six-digit NAICS codes appear in the Grower licensee category;
- 79 six-digit NAICS codes appear in the Processor licensee category;
- 81 six-digit NAICS codes appear in the Dispensary licensee category; and
- 63 six-digit NAICS codes appear in the Independent Testing Laboratory category.

Of the 95 six-digit NAICS codes that appear in the Grower licensee category, 81 (85.3%) were also included in the 2017 Disparity Study. These 81 NAICS codes account for approximately 61.6 percent of the total estimated lifecycle spend in the Grower licensee category.

Of the 79 six-digit NAICS codes that appear in the Processor licensee category, 70 (88.6%) were also included in the 2017 Disparity Study. These 70 NAICS codes account for approximately 92.3 percent of the total estimated lifecycle spend in the Processor licensee category.

Of the 81 six-digit NAICS codes that appear in the Dispensary licensee category, 75 (92.6%) were also included in the 2017 Disparity Study. These 75 NAICS codes account for approximately 96.0 percent of the total estimated lifecycle spend in the Dispensary licensee category.

Of the 63 six-digit NAICS codes that appear in the Independent Testing Laboratory category, 61 (96.8%) were also included in the 2017 Disparity Study. These 61 NAICS codes account for approximately 97.4 percent of the total estimated lifecycle spend in the Independent Testing Laboratory category.

⁴ See, e.g., MGT Report, Table 2, pp. 7-9. One additional code, NAICS 111998 (Marijuana, grown in an open field), was included in Table 2 but excluded from most of the MGT Report's other analyses, because no Maryland medical cannabis licensee is currently growing marijuana outdoors. Because of this, we exclude this NAICS code from any further analysis unless specifically indicated otherwise. It is worth noting, however, that NAICS code 111998 is included in the 2017 Disparity Study.

Overall, of the 109 six-digit NAICS codes that are relevant to the major activities of the medical cannabis business, 95 (87.2%) were also included in the 2017 Disparity Study. These 95 NAICS codes account for approximately 90.8 percent of the total estimated lifecycle spend across the combined Grower, Processor, Dispensary, and Independent Testing Laboratory categories.

B. Correspondence by Six-Digit NAICS Code Between the Ancillary Industry Activities in the MGT Report and the 2017 Disparity Study

The MGT Report identified 44 six-digit NAICS codes that are relevant to the ancillary activities of the medical cannabis business.⁵ Of these:

- 12 six-digit NAICS codes appear in the Information, Finance and Insurance category;
- 6 six-digit NAICS codes appear in the Real Estate, Rentals and Leasing category;
- 14 six-digit NAICS codes appear in the Professional, Scientific and Technical Services category;
- 9 six-digit NAICS codes appear in the Management, Administration and Support Services category; and
- 3 six-digit NAICS codes appear in the Health Care and Other Services category.

Of the 12 six-digit NAICS codes that appear in the Information, Finance and Insurance category, 8 (66.7%) were also included in the 2017 Disparity Study.

Of the 6 six-digit NAICS codes that appear in the Real Estate, Rentals and Leasing category, 3 (50.0%) were also included in the 2017 Disparity Study.

Of the 14 six-digit NAICS codes that appear in the Professional, Scientific and Technical Services category, 11 (78.6%) were also included in the 2017 Disparity Study.

Of the 9 six-digit NAICS codes that appear in the Management, Administration and Support Services category, 8 (88.9%) were also included in the 2017 Disparity Study.

⁵ MGT Report, pp. 26, 40-43.

Of the 3 six-digit NAICS codes that appear in the Health Care and Other Services category, 3 (100.0%) were also included in the 2017 Disparity Study.

Overall, of the 44 six-digit NAICS codes that are relevant to the ancillary activities of the medical cannabis business, 33 (75.0%) were also included in the 2017 Disparity Study.

C. Correspondence by Four-Digit NAICS Code Between the Major Industry Activities in the MGT Report and the 2017 Disparity Study

The 109 six-digit NAICS codes relevant to the major activities of the medical cannabis business correspond to 62 four-digit NAICS codes.⁶ Of these:

- 52 four-digit NAICS codes appear in the Grower licensee category;
- 46 four-digit NAICS codes appear in the Processor licensee category;
- 48 four-digit NAICS codes appear in the Dispensary licensee category; and
- 31 four-digit NAICS codes appear in the Independent Testing Laboratory category.

Of the 52 four-digit NAICS codes that appear in the Grower licensee category, 47 (90.4%) were also included in the 2017 Disparity Study. These 47 NAICS codes account for approximately 96.6 percent of the total estimated lifecycle spend in the Grower licensee category.

Of the 46 four-digit NAICS codes that appear in the Processor licensee category, 41 (89.1%) were also included in the 2017 Disparity Study. These 41 NAICS codes account for approximately 97.7 percent of the total estimated lifecycle spend in the Processor licensee category.

Of the 48 four-digit NAICS codes that appear in the Dispensary licensee category, 43 (89.6%) were also included in the 2017 Disparity Study. These 43 NAICS codes account for approximately 96.9 percent of the total estimated lifecycle spend in the Dispensary licensee category.

Of the 31 four-digit NAICS codes that appear in the Independent Testing Laboratory category, 29 (93.5%) were also included in the 2017 Disparity Study. These 29 NAICS

⁶ NERA calculations using the MGT Report, Table 2, pp. 7-9. *See also* fn. 4.

codes account for approximately 97.4 percent of the total estimated lifecycle spend in the Independent Testing Laboratory category.

Overall, of the 62 four-digit NAICS codes that are relevant to the major activities of the medical cannabis business, 57 (91.9%) were also included in the 2017 Disparity Study. These 57 NAICS codes account for approximately 96.9 percent of the total estimated lifecycle spend across the combined Grower, Processor, Dispensary, and Independent Testing Laboratory categories.

D. Correspondence by Four-Digit NAICS Code Between the Ancillary Industry Activities in the MGT Report and the 2017 Disparity Study

The MGT Report identified 24 four-digit NAICS codes that are relevant to the ancillary activities of the medical cannabis business.⁷ Of these:

- 6 four-digit NAICS codes appear in the Information, Finance and Insurance category;
- 5 four-digit NAICS codes appear in the Real Estate, Rentals and Leasing category;
- 6 four-digit NAICS codes appear in the Professional, Scientific and Technical Services category;
- 5 four-digit NAICS codes appear in the Management, Administration and Support Services category; and
- 2 four-digit NAICS codes appear in the Health Care and Other Services category.

Of the 6 four-digit NAICS codes that appear in the Information, Finance and Insurance category, 6 (100.0%) were also included in the 2017 Disparity Study.

Of the 5 four-digit NAICS codes that appear in the Real Estate, Rentals and Leasing category, 4 (80.0%) were also included in the 2017 Disparity Study.

Of the 6 four-digit NAICS codes that appear in the Professional, Scientific and Technical Services category, 6 (100.0%) were also included in the 2017 Disparity Study.

⁷ MGT Report, pp. 26, 40-43.

Of the 5 four-digit NAICS codes that appear in the Management, Administration and Support Services category, 4 (80.0%) were also included in the 2017 Disparity Study.

Of the 2 four-digit NAICS codes that appear in the Health Care and Other Services category, 2 (100.0%) were also included in the 2017 Disparity Study.

Overall, of the 24 four-digit NAICS codes that are relevant to the ancillary activities of the medical cannabis business, 22 (91.7%) were also included in the 2017 Disparity Study.

E. Supplementary Statistical Analyses

In the 2017 Disparity Study, I used a large dataset from the Census Bureau's American Community Survey to evaluate, using the statistical technique of regression analysis, the extent of disparities affecting minority- and women-owned businesses in the geographic market area and industries that are relevant to State of Maryland contracting activity. We considered disparities in three distinct but related areas: (1) wage and salary earnings, (2) business owner earnings, and (3) business formation rates.

With respect to disparities in wage and salary earnings, the 2017 Disparity Study concluded:

... [M]inorities and women earn substantially and significantly less than their nonminority male counterparts in the State of Maryland market area. Such disparities are consistent with race and gender discrimination in the labor force that, in addition to its direct effect on workers, also reduces the future availability of M/WBEs by stifling opportunities for minorities and women to progress through those internal labor markets and occupational hierarchies that are most likely to lead to entrepreneurial opportunities. These disparities reflect more than mere "societal discrimination" because they demonstrate the nexus between discrimination in the job market and reduced entrepreneurial opportunities for minorities and women. Other things equal, these reduced entrepreneurial opportunities in turn lead to lower M/WBE availability levels than would be observed in a race- and gender-neutral market area.⁸

⁸ NERA Economic Consulting, *Business Disparities in the Maryland Market Area* (February 8, 2017), p. 6.

With respect to disparities in business owner earnings, the 2017 Disparity Study concluded:

... [M]inority and female entrepreneurs earned substantially and significantly less from their efforts than similarly situated nonminority male entrepreneurs. These disparities are a symptom of discrimination in commercial markets that directly and adversely affect M/WBEs. Other things equal, if minorities and women cannot earn remuneration from their entrepreneurial efforts comparable to that of nonminority males, growth rates will slow, business failure rates will increase, and business formation rates may decrease. Combined, these phenomena result in lower M/WBE availability levels than would otherwise be observed in a race- and gender-neutral market area.⁹

With respect to disparities in business formation rates, the 2017 Disparity Study concluded:

... [M]inorities and women in general are substantially and statistically significantly less likely to own their own businesses than would be expected based upon their observable demographic characteristics including age, education, geographic location, industry and trends over time. Moreover, as demonstrated in previous sections, these groups also suffer substantial and significant earnings disadvantages relative to comparable nonminority males whether they work as wage and salary employees or as entrepreneurs. These findings are consistent with results that would be observed in a discriminatory market area.¹⁰

As a check on our findings above in Sections II.A through II.D, I re-created the regression analyses that were performed for the 2017 Disparity Study and customized them to reflect the NAICS codes identified in the MGT Report that are relevant to Growers, Processors, Dispensaries, Independent Testing Laboratories and Ancillary activities.

The results of these analyses are summarized below in Tables 1 through 6. Each table consists of three columns, one for each type of regression analysis performed, and seven rows, one for each type of MBE. “Adverse” in a given cell indicates that the corresponding regression coefficient was negative and statistically significant – a result

⁹ NERA Economic Consulting, *Business Disparities in the Maryland Market Area* (February 8, 2017), p. 6.

¹⁰ NERA Economic Consulting, *Business Disparities in the Maryland Market Area* (February 8, 2017), p. 165.

consistent with the presence of discrimination. Of the 126 different coefficients summarized in Tables 1 through 6, 122, or 96.8 percent, are consistent with the presence of discrimination.¹¹

Table 1. Regressions Analysis Results on NAICS Codes for Growers

	Wages and Salaries	Business Owner Earnings	Business Formation Rate
African American	Adverse	Adverse	Adverse
Hispanic	Adverse	Adverse	Adverse
Asian/Pacific Islander	Adverse	Adverse	Adverse
Native American	Adverse	Adverse	Adverse
Minorities	Adverse	Adverse	Adverse
Non-minority Female	Adverse	Adverse	Adverse
Minorities & Women	Adverse	Adverse	Adverse

Table 2. Regressions Analysis Results on NAICS Codes for Processors

	Wages and Salaries	Business Owner Earnings	Business Formation Rate
African American	Adverse	Adverse	Adverse
Hispanic	Adverse	Adverse	Adverse
Asian/Pacific Islander	Adverse	Adverse	Not Adverse
Native American	Adverse	Adverse	Adverse
Minorities	Adverse	Adverse	Adverse
Non-minority Female	Adverse	Adverse	Adverse
Minorities & Women	Adverse	Adverse	Adverse

¹¹ The underlying regression results for Tables 1 through 6 are provided in the Appendix to this Report. See also Chapter IV of the 2017 Disparity Study (pp. 121-176) for additional documentation of the data and methods used in these analyses.

Table 3. Regressions Analysis Results on NAICS Codes for Dispensaries

	Wages and Salaries	Business Owner Earnings	Business Formation Rate
African American	Adverse	Adverse	Adverse
Hispanic	Adverse	Adverse	Adverse
Asian/Pacific Islander	Adverse	Adverse	Not Adverse
Native American	Adverse	Adverse	Adverse
Minorities	Adverse	Adverse	Adverse
Non-minority Female	Adverse	Adverse	Adverse
Minorities & Women	Adverse	Adverse	Adverse

Table 4. Regressions Analysis Results on NAICS Codes for Independent Testing Labs

	Wages and Salaries	Business Owner Earnings	Business Formation Rate
African American	Adverse	Adverse	Adverse
Hispanic	Adverse	Adverse	Adverse
Asian/Pacific Islander	Adverse	Adverse	Not Adverse
Native American	Adverse	Adverse	Adverse
Minorities	Adverse	Adverse	Adverse
Non-minority Female	Adverse	Adverse	Adverse
Minorities & Women	Adverse	Adverse	Adverse

Table 5. Regressions Analysis Results on NAICS Codes for Growers, Processors, Dispensaries, and Independent Testing Labs Combined

	Wages and Salaries	Business Owner Earnings	Business Formation Rate
African American	Adverse	Adverse	Adverse
Hispanic	Adverse	Adverse	Adverse
Asian/Pacific Islander	Adverse	Adverse	Adverse
Native American	Adverse	Adverse	Adverse
Minorities	Adverse	Adverse	Adverse
Non-minority Female	Adverse	Adverse	Adverse
Minorities & Women	Adverse	Adverse	Adverse

Table 6. Regressions Analysis Results on NAICS Codes for Ancillary Activities

	Wages and Salaries	Business Owner Earnings	Business Formation Rate
African American	Adverse	Adverse	Adverse
Hispanic	Adverse	Adverse	Adverse
Asian/Pacific Islander	Adverse	Adverse	Adverse
Native American	Adverse	Adverse	Adverse
Minorities	Adverse	Adverse	Adverse
Non-minority Female	Adverse	Adverse	Not Adverse
Minorities & Women	Adverse	Adverse	Adverse

III. Conclusions

After reviewing and analyzing the information received from the State, and bearing in mind the 2017 Disparity Study's finding that discrimination continues to adversely impact minority-owned and women-owned firms throughout the Maryland economy, I conclude, based upon the information available to me at this time, that the 2017 Disparity Study provides a strong basis in evidence, consisting of both quantitative and qualitative findings, that supports the use of race- and gender-based measures to remediate discrimination affecting minority- and women-owned businesses in the types of industries relevant to the medical cannabis business.

Moreover, the 2017 Disparity Study details a range of race- and gender-neutral activities that the State has already undertaken to address existing disparities. The 2017 Disparity Study found that, notwithstanding these race- and gender-neutral activities, many of which have been in place for a number of years, disparities continue to exist in both public and private contracting in the same geographic and industry markets in which medical cannabis licensees and independent testing laboratories are likely to operate. These disparities, in general, are large, adverse, and statistically significant. In addition, the 2017 Disparity Study contains both qualitative and quantitative evidence to suggest that economy-wide contracting disparities in Maryland's relevant markets are even greater than disparities in the public sector. This difference may be due to the fact that the State has, for a number of years, operated an assertive MBE program in an attempt to remedy discrimination, which would tend to reduce, though it has not yet eliminated, the effects of discrimination in public procurement. Absent such affirmative remedial efforts by the State, I would expect to see evidence in the relevant markets in which the medical cannabis licensees will operate that is consistent with the continued presence of business discrimination.

I would note that I am an economist, but not a lawyer. I hold a doctorate in economics and I am well qualified to review the data in the MGT Report and to opine on its significance with respect to the 2017 Disparity Study. I am a Managing Director of NERA, the head of its Austin office, a member of its labor and employment practice, and the head of its national affirmative action consulting practice. I have conducted more than 50 disparity, availability, and related studies in my career and directed numerous other studies concerning various aspects of business markets and labor markets. These studies are often done in the context of litigation involving business enterprise or employment discrimination. I have acted as an expert witness in MBE program and other discrimination-related litigation. I have testified and been accepted as an expert economist and statistician in federal district courts in California, Florida, Georgia, Illinois, Minnesota, and Texas, in the U.S. Court of Federal Claims, in state courts in Illinois and Texas, and before both chambers of the U.S. Congress.

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In closing, as an expert in disparity studies and the economics of business discrimination, I have a high level of expertise concerning how economic data relates to the law that has been applied to MBE and related programs by courts and legislatures. I have not been asked to review the specific details of the Maryland medical cannabis statute and regulations and I do not offer any opinion about the specifics of the statute or the regulations. I would note, however, that even where a strong basis in evidence exists to support a race- or gender-based program, that fact alone should not end the inquiry. Specifically, it is imperative that any race- or gender-conscious mechanisms applied to the medical cannabis business be carefully established and consistent with the law.

Sincerely,

A handwritten signature in black ink that reads "Jon Wainwright". The signature is written in a cursive, flowing style.

Jon Wainwright
Managing Director
NERA Economic Consulting

Table A.1. Annual Wage Earnings Regressions, NAICS Codes for Growers, 2010-2014

Independent Variables	Specification		
	(1)	(2)	(3)
African American	-0.420 (131.51)	-0.423 (127.40)	-0.423 (127.45)
Hispanic	-0.299 (108.12)	-0.298 (106.36)	-0.298 (106.50)
Asian	-0.199 (42.29)	-0.197 (40.59)	-0.199 (42.20)
Native American	-0.388 (36.50)	-0.386 (36.04)	-0.388 (36.51)
Two or more races	-0.292 (43.33)	-0.293 (42.58)	-0.292 (43.30)
Nonminority Female	-0.339 (172.10)	-0.340 (169.40)	-0.340 (169.57)
Age	0.177 (295.90)	0.177 (295.9)	0.177 (295.89)
Age ²	-0.002 (262.41)	-0.002 (262.41)	-0.002 (262.41)
MDMA	0.516 (39.62)	0.504 (34.96)	0.499 (35.78)
MDMA*African American		0.070 (4.52)	0.073 (4.73)
MDMA*Hispanic		-0.039 (2.31)	-0.037 (2.18)
MDMA*Asian		-0.035 (1.61)	n/a
MDMA*Native American		-0.119 (1.22)	n/a
MDMA*Two or more races		0.049 (1.25)	n/a
MDMA*Nonminority Female		0.035 (2.97)	0.038 (3.26)
Education (16 categories)	Yes	Yes	Yes
Geography (51 categories)	Yes	Yes	Yes
Industry (88 categories)	Yes	Yes	Yes
N	982,548	982,548	982,548
Adj. R ²	.2842	.2843	.2843

Source: NERA calculations from the 2010-2014 ACS Public Use Microdata Sample.

Notes: (1) See 2017 Disparity Study, pp. 127-131, for a description of Specifications 1 through 3; (2) Universe is all private sector wage and salary workers between the ages of 16 and 64; observations with imputed values to the dependent variable and all independent variables are excluded; (3) Reported number is the percentage difference in annual wages between a given group and nonminority men; (4) Number in parentheses is the absolute value of the associated t-statistic. Using a two-tailed test, t-statistics greater than 1.64 (1.96) (2.58) are statistically significant at a 90 (95) (99) percent confidence level; (5) Geography is defined based on place of residence; (6) “MDMA” is shorthand for “State of Maryland Market Area,” which includes the State of Maryland, the State of Delaware, the District of Columbia, and the Virginia and West Virginia portions of the Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Statistical Area; (7) “n/a” in Specification 3 means that the category was not included in the regression because it was not statistically significant in Specification 2, as described in the 2017 Disparity Study, pp. 129-131; (8) The “Yes” values next to the “Education,” “Geography” and “Industry” rows indicate that control variables were included in the regression specification for these factors.

Table A.2. Annual Wage Earnings Regressions, NAICS Codes for Processors, 2010-2014

Independent Variables	Specification		
	(1)	(2)	(3)
African American	-0.417 (118.99)	-0.420 (115.21)	-0.420 (115.31)
Hispanic	-0.296 (96.61)	-0.296 (95.02)	-0.296 (96.61)
Asian	-0.213 (40.56)	-0.210 (38.94)	-0.210 (39.02)
Native American	-0.385 (33.82)	-0.383 (33.39)	-0.385 (33.84)
Two or more races	-0.285 (38.14)	-0.287 (37.72)	-0.288 (37.76)
Nonminority Female	-0.329 (145.55)	-0.330 (143.41)	-0.330 (143.65)
Age	0.174 (257.63)	0.174 (257.63)	0.174 (257.62)
Age ²	-0.002 (228.45)	-0.002 (228.46)	-0.002 (228.45)
MDMA	0.503 (33.96)	0.492 (30.26)	0.482 (30.76)
MDMA*African American		0.061 (3.57)	0.068 (4.02)
MDMA*Hispanic		-0.037 (1.93)	n/a
MDMA*Asian		-0.060 (2.35)	-0.054 (2.11)
MDMA*Native American		-0.131 (1.24)	n/a
MDMA*Two or more races		0.094 (2.05)	0.101 (2.21)
MDMA*Nonminority Female		0.037 (2.70)	0.044 (3.27)
Education (16 categories)	Yes	Yes	Yes
Geography (51 categories)	Yes	Yes	Yes
Industry (88 categories)	Yes	Yes	Yes
N	779,941	779,941	779,941
Adj. R ²	.2688	.2688	.2688

Source and Notes: See Table A.1.

Table A.3. Annual Wage Earnings Regressions, NAICS Codes for Dispensaries, 2010-2014

Independent Variables	Specification		
	(1)	(2)	(3)
African American	-0.416 (123.20)	-0.419 (119.10)	-0.419 (119.18)
Hispanic	-0.302 (101.88)	-0.301 (100.22)	-0.302 (101.83)
Asian	-0.215 (44.21)	-0.211 (42.18)	-0.211 (42.21)
Native American	-0.390 (35.39)	-0.389 (34.99)	-0.390 (35.39)
Two or more races	-0.294 (41.71)	-0.296 (41.14)	-0.294 (41.69)
Nonminority Female	-0.332 (155.40)	-0.332 (153.00)	-0.332 (155.40)
Age	0.184 (286.59)	0.184 (286.6)	0.184 (286.59)
Age ²	-0.002 (254.33)	-0.002 (254.34)	-0.002 (254.34)
MDMA	0.483 (33.99)	0.484 (30.67)	0.489 (33.79)
MDMA*African American		0.045 (2.72)	0.040 (2.60)
MDMA*Hispanic		-0.036 (1.91)	n/a
MDMA*Asian		-0.094 (3.98)	-0.097 (4.22)
MDMA*Native American		-0.104 (0.99)	n/a
MDMA*Two or more races		0.072 (1.68)	n/a
MDMA*Nonminority Female		0.022 (1.71)	n/a
Education (16 categories)	Yes	Yes	Yes
Geography (51 categories)	Yes	Yes	Yes
Industry (88 categories)	Yes	Yes	Yes
N	858,504	858,504	858,504
Adj. R ²	.2788	.2788	.2788

Source and Notes: See Table A.1.

Table A.4. Annual Wage Earnings Regressions, NAICS Codes for Independent Testing Laboratories, 2010-2014

Independent Variables	Specification		
	(1)	(2)	(3)
African American	-0.441 (112.76)	-0.445 (108.91)	-0.445 (108.92)
Hispanic	-0.304 (89.23)	-0.303 (87.59)	-0.302 (87.61)
Asian	-0.206 (35.40)	-0.201 (33.46)	-0.200 (33.41)
Native American	-0.409 (33.80)	-0.409 (33.42)	-0.409 (33.79)
Two or more races	-0.299 (36.99)	-0.301 (36.47)	-0.299 (36.96)
Nonminority Female	-0.334 (135.80)	-0.334 (133.49)	-0.334 (135.79)
Age	0.174 (235.20)	0.174 (235.21)	0.174 (235.20)
Age ²	-0.002 (208.82)	-0.002 (208.82)	-0.002 (208.83)
MDMA	0.529 (33.12)	0.529 (29.82)	0.542 (32.71)
MDMA*African American		0.070 (3.78)	0.061 (3.44)
MDMA*Hispanic		-0.040 (1.99)	-0.048 (2.49)
MDMA*Asian		-0.099 (3.78)	-0.107 (4.16)
MDMA*Native American		-0.080 (0.70)	n/a
MDMA*Two or more races		0.082 (1.71)	n/a
MDMA*Nonminority Female		0.021 (1.46)	n/a
Education (16 categories)	Yes	Yes	Yes
Geography (51 categories)	Yes	Yes	Yes
Industry (88 categories)	Yes	Yes	Yes
N	663,342	663,342	663,342
Adj. R ²	.2641	.2642	.2642

Source and Notes: See Table A.1.

Table A.5. Annual Wage Earnings Regressions, NAICS Codes for Ancillary Activities, 2010-2014

Independent Variables	Specification		
	(1)	(2)	(3)
African American	-0.427 (121.27)	-0.432 (117.72)	-0.432 (117.83)
Hispanic	-0.367 (105.96)	-0.368 (104.50)	-0.367 (105.92)
Asian	-0.172 (39.84)	-0.168 (37.39)	-0.167 (37.32)
Native American	-0.423 (28.94)	-0.425 (28.82)	-0.423 (28.94)
Two or more races	-0.321 (43.64)	-0.323 (42.77)	-0.321 (43.62)
Nonminority Female	-0.367 (169.70)	-0.368 (166.34)	-0.367 (169.73)
Age	0.189 (250.96)	0.189 (250.94)	0.189 (250.95)
Age ²	-0.002 (224.54)	-0.002 (224.53)	-0.002 (224.53)
MDMA	0.490 (34.02)	0.474 (28.93)	0.495 (33.39)
MDMA*African American		0.104 (6.15)	0.088 (5.70)
MDMA*Hispanic		0.036 (1.61)	n/a
MDMA*Asian		-0.057 (3.23)	-0.070 (4.27)
MDMA*Native American		0.130 (0.88)	n/a
MDMA*Two or more races		0.065 (1.63)	n/a
MDMA*Nonminority Female		0.024 (1.88)	n/a
Education (16 categories)	Yes	Yes	Yes
Geography (51 categories)	Yes	Yes	Yes
Industry (88 categories)	Yes	Yes	Yes
N	647,693	647,693	647,693
Adj. R ²	.3229	.3230	.3230

Source and Notes: See Table A.1.

Table A.6. Annual Wage Earnings Regressions, NAICS Codes for Growers, Processors, Dispensaries and Independent Testing Laboratories Combined, 2010-2014

Independent Variables	Specification		
	(1)	(2)	(3)
African American	-0.422 (143.42)	-0.424 (138.77)	-0.424 (138.77)
Hispanic	-0.307 (117.97)	-0.306 (116.13)	-0.306 (116.14)
Asian	-0.201 (48.18)	-0.198 (45.94)	-0.198 (45.93)
Native American	-0.395 (39.91)	-0.394 (39.46)	-0.395 (39.91)
Two or more races	-0.299 (48.33)	-0.300 (47.43)	-0.299 (48.28)
Nonminority Female	-0.336 (184.43)	-0.336 (181.53)	-0.336 (181.56)
Age	0.183 (329.65)	0.183 (329.66)	0.183 (329.66)
Age ²	-0.002 (292.17)	-0.002 (292.18)	-0.002 (292.18)
MDMA	0.484 (39.57)	0.483 (35.27)	0.484 (35.61)
MDMA*African American		0.051 (3.50)	0.050 (3.46)
MDMA*Hispanic		-0.034 (2.05)	-0.035 (2.11)
MDMA*Asian		-0.073 (3.74)	-0.074 (3.79)
MDMA*Native American		-0.097 (1.02)	n/a
MDMA*Two or more races		0.037 (1.01)	n/a
MDMA*Nonminority Female		0.022 (2.01)	0.021 (1.95)
Education (16 categories)	Yes	Yes	Yes
Geography (51 categories)	Yes	Yes	Yes
Industry (88 categories)	Yes	Yes	Yes
N	1,128,040	1,128,040	1,128,040
Adj. R ²	.2941	.2941	.2941

Source and Notes: See Table A.1.

Table A.7. Annual Business Owner Earnings Regressions, NAICS Codes for Growers, 2010-2014

Independent Variables	Specification		
	(1)	(2)	(3)
African American	-0.484 (27.69)	-0.479 (26.22)	-0.484 (27.69)
Hispanic	-0.170 (11.60)	-0.174 (11.73)	-0.170 (11.60)
Asian	-0.248 (10.37)	-0.258 (10.54)	-0.248 (10.37)
Native American	-0.421 (8.69)	-0.419 (8.56)	-0.421 (8.69)
Two or more races	-0.393 (13.41)	-0.393 (13.19)	-0.393 (13.41)
Nonminority Female	-0.420 (45.31)	-0.421 (44.77)	-0.420 (45.31)
Age	0.172 (56.24)	0.172 (56.24)	0.172 (56.24)
Age ²	-0.002 (49.64)	-0.002 (49.64)	-0.002 (49.64)
MDMA	0.291 (4.86)	0.242 (3.80)	0.291 (4.86)
MDMA*African American		-0.080 (0.94)	n/a
MDMA*Hispanic		0.162 (1.61)	n/a
MDMA*Asian		0.264 (1.93)	n/a
MDMA*Native American		-0.200 (0.46)	n/a
MDMA*Two or more races		0.017 (0.08)	n/a
MDMA*Nonminority Female		0.066 (1.06)	n/a
Education (16 categories)	Yes	Yes	Yes
Geography (51 categories)	Yes	Yes	Yes
Industry (88 categories)	Yes	Yes	Yes
N	158,631	158,631	158,631
Adj. R ²	.0897	.0897	.0897

Source: NERA calculations from the 2010-2014 ACS Public Use Microdata Sample.

Notes: (1) See 2017 Disparity Study, pp. 139-141, for a description of specifications 1 through 3; (2) Universe is all persons in the private sector with positive business earnings between the ages of 16 and 64; observations with imputed values to the dependent variable and all independent variables are excluded; (3) Reported number is the percentage difference in annual business earnings between a given group and nonminority men; (4) Number in parentheses is the absolute value of the associated t-statistic. Using a two-tailed test, t-statistics greater than 1.64 (1.96) (2.58) are statistically significant at a 90 (95) (99) percent confidence level; (5) Geography is defined based on place of residence; (6) “MDMA” is shorthand for “State of Maryland Market Area,” which includes the State of Maryland, the State of Delaware, the District of Columbia, and the Virginia and West Virginia portions of the Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Statistical Area; (7) “n/a” in Specification 3 means that the category was not included in the regression because it was not statistically significant in Specification 2, as described in the 2017 Disparity Study, pp. 140-141.

Table A.8. Business Owner Earnings Regressions, NAICS Codes for Processors, 2010-2014

Independent Variables	Specification		
	(1)	(2)	(3)
African American	-0.442 (21.33)	-0.440 (20.30)	-0.442 (21.33)
Hispanic	-0.192 (11.81)	-0.195 (11.87)	-0.192 (11.81)
Asian	-0.220 (7.82)	-0.229 (7.96)	-0.220 (7.82)
Native American	-0.391 (7.02)	-0.390 (6.94)	-0.391 (7.02)
Two or more races	-0.383 (11.33)	-0.378 (10.97)	-0.383 (11.33)
Nonminority Female	-0.410 (36.98)	-0.411 (36.52)	-0.410 (36.98)
Age	0.143 (38.60)	0.143 (38.59)	0.143 (38.60)
Age ²	-0.001 (34.30)	-0.001 (34.29)	-0.001 (34.30)
MDMA	0.325 (4.65)	0.290 (3.85)	0.325 (4.65)
MDMA*African American		-0.047 (0.48)	n/a
MDMA*Hispanic		0.136 (1.25)	n/a
MDMA*Asian		0.234 (1.51)	n/a
MDMA*Native American		-0.143 (0.26)	n/a
MDMA*Two or more races		-0.175 (0.85)	n/a
MDMA*Nonminority Female		0.033 (0.44)	n/a
Education (16 categories)	Yes	Yes	Yes
Geography (51 categories)	Yes	Yes	Yes
Industry (88 categories)	Yes	Yes	Yes
N	115,116	115,116	115,116
Adj. R ²	.0740	.0740	.0740

Source and Notes: See Table A.7.

Table A.9. Business Owner Earnings Regressions, NAICS Codes for Dispensaries, 2010-2014

Independent Variables	Specification		
	(1)	(2)	(3)
African American	-0.446 (22.22)	-0.446 (21.30)	-0.446 (22.22)
Hispanic	-0.192 (12.03)	-0.195 (12.11)	-0.192 (12.03)
Asian	-0.216 (8.24)	-0.226 (8.42)	-0.216 (8.24)
Native American	-0.396 (7.26)	-0.395 (7.18)	-0.396 (7.26)
Two or more races	-0.380 (11.68)	-0.375 (11.28)	-0.380 (11.68)
Nonminority Female	-0.405 (38.43)	-0.405 (37.91)	-0.405 (38.43)
Age	0.148 (41.04)	0.148 (41.03)	0.148 (41.04)
Age ²	-0.001 (36.28)	-0.001 (36.27)	-0.001 (36.28)
MDMA	0.336 (4.92)	0.303 (4.11)	0.336 (4.92)
MDMA*African American		0.001 (0.01)	n/a
MDMA*Hispanic		0.157 (1.44)	n/a
MDMA*Asian		0.258 (1.71)	n/a
MDMA*Native American		-0.134 (0.25)	n/a
MDMA*Two or more races		-0.201 (1.03)	n/a
MDMA*Nonminority Female		0.007 (0.10)	n/a
Education (16 categories)	Yes	Yes	Yes
Geography (51 categories)	Yes	Yes	Yes
Industry (88 categories)	Yes	Yes	Yes
N	123,314	123,314	123,314
Adj. R ²	.0801	.0801	.0801

Source and Notes: See Table A.7.

Table A.10. Business Owner Earnings Regressions, NAICS Codes for Independent Testing Laboratories, 2010-2014

Independent Variables	Specification		
	(1)	(2)	(3)
African American	-0.496 (23.02)	-0.496 (22.15)	-0.496 (23.02)
Hispanic	-0.210 (12.41)	-0.214 (12.5)	-0.210 (12.41)
Asian	-0.238 (8.28)	-0.244 (8.30)	-0.238 (8.28)
Native American	-0.389 (6.69)	-0.391 (6.69)	-0.389 (6.69)
Two or more races	-0.379 (10.76)	-0.372 (10.31)	-0.379 (10.76)
Nonminority Female	-0.416 (36.53)	-0.415 (35.89)	-0.416 (36.53)
Age	0.149 (38.32)	0.149 (38.30)	0.149 (38.32)
Age ²	-0.001 (33.94)	-0.001 (33.93)	-0.001 (33.94)
MDMA	0.315 (4.37)	0.299 (3.82)	0.315 (4.37)
MDMA*African American		0.017 (0.15)	n/a
MDMA*Hispanic		0.178 (1.55)	n/a
MDMA*Asian		0.157 (1.02)	n/a
MDMA*Native American		0.235 (0.32)	n/a
MDMA*Two or more races		-0.243 (1.23)	n/a
MDMA*Nonminority Female		-0.040 (0.56)	n/a
Education (16 categories)	Yes	Yes	Yes
Geography (51 categories)	Yes	Yes	Yes
Industry (88 categories)	Yes	Yes	Yes
N	103,606	103,606	103,606
Adj. R ²	.0767	.0767	.0767

Source and Notes: See Table A.7.

Table A.11. Business Owner Earnings Regressions, NAICS Codes for Ancillary Activities, 2010-2014

Independent Variables	Specification		
	(1)	(2)	(3)
African American	-0.482 (19.68)	-0.476 (18.32)	-0.482 (19.68)
Hispanic	-0.259 (11.43)	-0.260 (11.31)	-0.259 (11.43)
Asian	-0.213 (7.63)	-0.223 (7.77)	-0.213 (7.63)
Native American	-0.493 (6.22)	-0.493 (6.18)	-0.493 (6.22)
Two or more races	-0.353 (8.65)	-0.349 (8.33)	-0.353 (8.65)
Nonminority Female	-0.332 (28.02)	-0.333 (27.53)	-0.332 (28.02)
Age	0.172 (35.04)	0.172 (35.04)	0.172 (35.04)
Age ²	-0.002 (30.39)	-0.002 (30.39)	-0.002 (30.39)
MDMA	0.258 (3.19)	0.231 (2.56)	0.258 (3.19)
MDMA*African American		-0.089 (0.83)	n/a
MDMA*Hispanic		0.030 (0.22)	n/a
MDMA*Asian		0.210 (1.52)	n/a
MDMA*Native American		0.011 (0.01)	n/a
MDMA*Two or more races		-0.116 (0.52)	n/a
MDMA*Nonminority Female		0.031 (0.43)	n/a
Education (16 categories)	Yes	Yes	Yes
Geography (51 categories)	Yes	Yes	Yes
Industry (88 categories)	Yes	Yes	Yes
N	79,823	79,823	79,823
Adj. R ²	.0794	.0794	.0794

Source and Notes: See Table A.7.

Table A.12. Business Owner Earnings Regressions, NAICS Codes for Growers, Processors, Dispensaries and Independent Testing Laboratories Combined, 2010-2014

Independent Variables	Specification		
	(1)	(2)	(3)
African American	-0.481 (28.54)	-0.478 (27.16)	-0.481 (28.54)
Hispanic	-0.181 (12.69)	-0.184 (12.82)	-0.181 (12.69)
Asian	-0.224 (9.89)	-0.232 (10.02)	-0.224 (9.89)
Native American	-0.424 (9.01)	-0.422 (8.89)	-0.424 (9.01)
Two or more races	-0.391 (13.74)	-0.390 (13.49)	-0.391 (13.74)
Nonminority Female	-0.424 (48.02)	-0.425 (47.38)	-0.424 (48.02)
Age	0.170 (57.49)	0.170 (57.49)	0.170 (57.49)
Age ²	-0.002 (50.56)	-0.002 (50.55)	-0.002 (50.56)
MDMA	0.287 (4.91)	0.249 (3.97)	0.287 (4.91)
MDMA*African American		-0.054 (0.65)	n/a
MDMA*Hispanic		0.170 (1.70)	n/a
MDMA*Asian		0.218 (1.70)	n/a
MDMA*Native American		-0.189 (0.43)	n/a
MDMA*Two or more races		-0.013 (0.07)	n/a
MDMA*Nonminority Female		0.032 (0.55)	n/a
Education (16 categories)	Yes	Yes	Yes
Geography (51 categories)	Yes	Yes	Yes
Industry (88 categories)	Yes	Yes	Yes
N	169,807	169,807	169,807
Adj. R ²	.0949	.0949	.0949

Source and Notes: See Table A.7.

Table A.13. Business Formation Regressions, NAICS Codes for Growers, 2010-2014

Independent Variables	Specification		
	(1)	(2)	(3)
African American	-0.073 (54.64)	-0.074 (53.12)	-0.074 (53.12)
Hispanic	-0.059 (56.44)	-0.059 (56.47)	-0.059 (56.47)
Asian	-0.049 (28.41)	-0.050 (28.3)	-0.050 (28.29)
Native American	-0.061 (15.84)	-0.062 (15.94)	-0.062 (15.88)
Two or more races	-0.032 (12.05)	-0.032 (11.83)	-0.032 (12.05)
Nonminority Female	-0.062 (77.86)	-0.063 (77.30)	-0.063 (77.30)
Age	0.013 (63.45)	0.013 (63.44)	0.013 (63.44)
Age ²	-0.000 (36.83)	-0.000 (36.81)	-0.000 (36.81)
MDMA	-0.029 (8.11)	-0.038 (9.93)	-0.037 (9.91)
MDMA*African American		0.022 (3.50)	0.022 (3.47)
MDMA*Hispanic		0.030 (4.24)	0.029 (4.21)
MDMA*Asian		0.030 (3.31)	0.029 (3.28)
MDMA*Native American		0.067 (1.57)	n/a
MDMA*Two or more races		0.001 (0.06)	n/a
MDMA*Nonminority Female		0.021 (4.64)	0.021 (4.60)
Education (16 categories)	Yes	Yes	Yes
Geography (51 categories)	Yes	Yes	Yes
Industry (25 categories)	Yes	Yes	Yes
N	1,130,936	1,130,936	1,130,936
Pseudo R ²	.1367	.1367	.1367

Source: NERA calculations from the 2010-2014 ACS Public Use Microdata Sample.

Notes: (1) See 2017 Disparity Study, pp. 153-154, for a description of specifications 1 through 3; (2) Universe is all private sector labor force participants between the ages of 16 and 64; observations with imputed values to the dependent variable and all independent variables are excluded; (3) Reported number represents the percentage point probability difference in business ownership rates between a given group and nonminority men, evaluated at the mean business ownership rate for the estimation sample; (4) Number in parentheses is the absolute value of the associated t-statistic. Using a two-tailed test, t-statistics greater than 1.64 (1.96) (2.58) are statistically significant at a 90 (95) (99) percent confidence level; (5) Geography is defined based on place of residence; (6) “MDMA” is shorthand for “State of Maryland Market Area,” which includes the State of Maryland, the State of Delaware, the District of Columbia, and the Virginia and West Virginia portions of the Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Statistical Area; (7) “n/a” in Specification 3 indicates that the category was not included in the regression because it was not statistically significant in Specification 2, as described in the 2017 Disparity Study, p. 154.

Table A.14. Business Formation Regressions, NAICS Codes for Processors, 2010-2014

Independent Variables	Specification		
	(1)	(2)	(3)
African American	-0.064 (45.72)	-0.064 (44.37)	-0.064 (44.34)
Hispanic	-0.042 (37.75)	-0.042 (37.71)	-0.042 (37.67)
Asian	-0.035 (18.25)	-0.036 (18.80)	-0.036 (18.77)
Native American	-0.055 (14.13)	-0.056 (14.23)	-0.055 (14.15)
Two or more races	-0.027 (9.83)	-0.027 (9.74)	-0.027 (9.85)
Nonminority Female	-0.049 (57.43)	-0.050 (56.71)	-0.049 (57.42)
Age	0.014 (61.85)	0.014 (61.84)	0.014 (61.84)
Age ²	-0.000 (40.42)	-0.000 (40.4)	-0.000 (40.40)
MDMA	-0.020 (5.19)	-0.026 (6.35)	-0.024 (6.14)
MDMA*African American		0.016 (2.40)	0.013 (2.10)
MDMA*Hispanic		0.017 (2.42)	0.014 (2.13)
MDMA*Asian		0.049 (4.78)	0.046 (4.58)
MDMA*Native American		0.073 (1.67)	n/a
MDMA*Two or more races		0.007 (0.41)	n/a
MDMA*Nonminority Female		0.007 (1.48)	n/a
Education (16 categories)	Yes	Yes	Yes
Geography (51 categories)	Yes	Yes	Yes
Industry (25 categories)	Yes	Yes	Yes
N	892,432	892,432	892,432
Pseudo R ²	.1364	.1364	.1364

Source and Notes: See Table A.13.

Table A.15. Business Formation Regressions, NAICS Codes for Dispensaries, 2010-2014

Independent Variables	Specification		
	(1)	(2)	(3)
African American	-0.062 (47.58)	-0.063 (46.09)	-0.062 (46.04)
Hispanic	-0.038 (36.9)	-0.039 (36.79)	-0.038 (36.95)
Asian	-0.031 (18.13)	-0.033 (18.55)	-0.032 (18.48)
Native American	-0.053 (14.41)	-0.053 (14.49)	-0.053 (14.42)
Two or more races	-0.027 (10.44)	-0.027 (10.32)	-0.027 (10.46)
Nonminority Female	-0.048 (60.30)	-0.048 (59.63)	-0.048 (60.29)
Age	0.014 (66.10)	0.014 (66.09)	0.014 (66.09)
Age ²	-0.000 (43.28)	-0.000 (43.27)	-0.000 (43.28)
MDMA	-0.017 (4.66)	-0.022 (5.76)	-0.019 (5.23)
MDMA*African American		0.013 (2.13)	0.009 (1.59)
MDMA*Hispanic		0.013 (1.94)	n/a
MDMA*Asian		0.039 (4.17)	0.034 (3.79)
MDMA*Native American		0.063 (1.52)	n/a
MDMA*Two or more races		0.005 (0.32)	n/a
MDMA*Nonminority Female		0.008 (1.84)	n/a
Education (16 categories)	Yes	Yes	Yes
Geography (51 categories)	Yes	Yes	Yes
Industry (25 categories)	Yes	Yes	Yes
N	978,410	978,410	978,410
Pseudo R ²	.1466	.1466	.1466

Source and Notes: See Table A.13.

Table A.16. Business Formation Regressions, NAICS Codes for Independent Testing Laboratories, 2010-2014

Independent Variables	Specification		
	(1)	(2)	(3)
African American	-0.072 (45.00)	-0.072 (42.99)	-0.072 (44.85)
Hispanic	-0.047 (38.01)	-0.047 (37.87)	-0.047 (37.88)
Asian	-0.041 (20.07)	-0.043 (20.46)	-0.043 (20.46)
Native American	-0.060 (13.79)	-0.060 (13.79)	-0.060 (13.81)
Two or more races	-0.031 (10.06)	-0.031 (9.98)	-0.031 (10.08)
Nonminority Female	-0.057 (59.32)	-0.057 (58.68)	-0.057 (58.71)
Age	0.016 (59.85)	0.016 (59.85)	0.016 (59.85)
Age ²	-0.000 (38.55)	-0.000 (38.55)	-0.000 (38.55)
MDMA	-0.023 (5.54)	-0.029 (6.50)	-0.029 (6.53)
MDMA*African American		0.000 (0.03)	n/a
MDMA*Hispanic		0.015 (1.97)	0.015 (1.95)
MDMA*Asian		0.047 (4.27)	0.047 (4.26)
MDMA*Native American		0.032 (0.69)	n/a
MDMA*Two or more races		0.008 (0.47)	n/a
MDMA*Nonminority Female		0.011 (2.16)	0.011 (2.15)
Education (16 categories)	Yes	Yes	Yes
Geography (51 categories)	Yes	Yes	Yes
Industry (25 categories)	Yes	Yes	Yes
N	764,035	764,035	764,035
Pseudo R ²	.1370	.1370	.1370

Source and Notes: See Table A.13.

Table A.17. Business Formation Regressions, NAICS Codes for Ancillary Activities, 2010-2014

Independent Variables	Specification		
	(1)	(2)	(3)
African American	-0.060 (50.00)	-0.061 (48.62)	-0.061 (48.62)
Hispanic	-0.034 (28.91)	-0.035 (29.36)	-0.035 (29.35)
Asian	-0.048 (38.60)	-0.049 (38.69)	-0.049 (38.69)
Native American	-0.032 (6.39)	-0.032 (6.32)	-0.032 (6.48)
Two or more races	-0.018 (7.42)	-0.019 (7.45)	-0.018 (7.43)
Nonminority Female	-0.016 (21.67)	-0.018 (23.31)	-0.018 (23.30)
Age	0.011 (47.32)	0.011 (47.31)	0.011 (47.31)
Age ²	-0.000 (30.28)	-0.000 (30.27)	-0.000 (30.27)
MDMA	-0.026 (8.02)	-0.041 (11.88)	-0.040 (11.89)
MDMA*African American		0.032 (5.15)	0.031 (5.11)
MDMA*Hispanic		0.031 (3.93)	0.030 (3.89)
MDMA*Asian		0.046 (6.66)	0.046 (6.62)
MDMA*Native American		-0.034 (0.83)	n/a
MDMA*Two or more races		0.012 (0.95)	n/a
MDMA*Nonminority Female		0.043 (10.16)	0.043 (10.16)
Education (16 categories)	Yes	Yes	Yes
Geography (51 categories)	Yes	Yes	Yes
Industry (25 categories)	Yes	Yes	Yes
N	715,307	715,307	715,307
Pseudo R ²	.1391	.1394	.1394

Source and Notes: See Table A.13.

Table A.18. Business Formation Regressions, NAICS Codes for Growers, Processors, Dispensaries and Independent Testing Laboratories Combined, 2010-2014

Independent Variables	Specification		
	(1)	(2)	(3)
African American	-0.066 (56.57)	-0.066 (54.87)	-0.066 (54.86)
Hispanic	-0.053 (57.37)	-0.053 (57.38)	-0.053 (57.38)
Asian	-0.040 (27.35)	-0.041 (27.17)	-0.041 (27.17)
Native American	-0.055 (16.24)	-0.056 (16.32)	-0.055 (16.29)
Two or more races	-0.029 (12.73)	-0.029 (12.48)	-0.029 (12.73)
Nonminority Female	-0.056 (80.22)	-0.057 (79.77)	-0.057 (79.78)
Age	0.012 (66.79)	0.012 (66.78)	0.012 (66.78)
Age ²	-0.000 (39.10)	-0.000 (39.08)	-0.000 (39.08)
MDMA	-0.024 (7.49)	-0.032 (9.38)	-0.032 (9.38)
MDMA*African American		0.017 (2.98)	0.017 (2.95)
MDMA*Hispanic		0.027 (4.20)	0.026 (4.18)
MDMA*Asian		0.021 (2.75)	0.021 (2.73)
MDMA*Native American		0.053 (1.40)	n/a
MDMA*Two or more races		-0.000 (0.03)	n/a
MDMA*Nonminority Female		0.021 (5.24)	0.021 (5.22)
Education (16 categories)	Yes	Yes	Yes
Geography (51 categories)	Yes	Yes	Yes
Industry (25 categories)	Yes	Yes	Yes
N	1,287,063	1,287,063	1,287,063
Pseudo R ²	.1551	.1551	.1551

Source and Notes: See Table A.13.



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