Racial Equity and Social Justice (RESJ) Impact Statement

Office of Legislative Oversight

EXPEDITED FINANCE — ECONOMIC DEVELOPMENT FUND - SMALL

BILL 31-22: BUSINESS INNOVATION RESEARCH AND SMALL BUSINESS

TECHNOLOGY TRANSFER MATCHING GRANT PROGRAM

SUMMARY

The Office of Legislative Oversight (OLO) anticipates Expedited Bill 31-22 would not have a favorable impact on racial equity and social justice (RESJ) in the County. Despite expected changes to the Small Business Innovation Research (SBIR)/Small Business Technology Transfer (STTR) Matching Grant Program by Executive staff, the program will likely continue to reinforce racial disparities in the local biotech industry.

PURPOSE OF RESJ IMPACT STATEMENTS

The purpose of RESJ impact statements (RESJIS) is to evaluate the anticipated impact of legislation on racial equity and social justice in the County. Racial equity and social justice refer to a **process** that focuses on centering the needs, leadership, and power of communities of color and low-income communities with a **goal** of eliminating racial and social inequities.¹ Achieving racial equity and social justice usually requires seeing, thinking, and working differently to address the racial and social harms that have caused racial and social inequities.²

Purpose of Expedited Bill 31-22

Coordinated by the U.S. Small Business Administration (SBA), the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs are competitive federal awards programs that encourage domestic small businesses to engage in Federal Research/Research and Development (R/R&D) with the potential for commercialization. The SBIR/STTR programs are structured in three phases:³

- The objective of **Phase I** is to establish the technical merit, feasibility, and commercial potential of the proposed R/R&D efforts and to determine the quality of performance of the small business awardee organization prior to providing further federal support in Phase II. SBIR/STTR Phase I awards are generally \$50,000 \$250,000 for six months (SBIR) or 1 year (STTR).
- The objective of **Phase II** is to continue the R/R&D efforts initiated in Phase I. Funding is based on the results achieved in Phase I and the scientific and technical merit and commercial potential of the project proposed in Phase II. Typically, only Phase I awardees are eligible for a Phase II award. SBIR/STTR Phase II awards are generally \$750,000 for two years.
- The objective of Phase III, where appropriate, is for the small business to pursue commercialization objectives
 resulting from the Phase I/II R/R&D activities. The SBIR/STTR programs do not fund Phase III. At some federal
 agencies, Phase III may involve follow-on non-SBIR/STTR funded R&D or production contracts for products,
 processes or services intended for use by the U.S. Government.

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In fiscal year 2019, 11 federal agencies participated in the SBIR program and five federal agencies participated in the STTR program. SBIR and STTR obligations totaled \$3.29 billion and \$429.3 million in fiscal year 2019.4

In fiscal year 2019, the County established the local SBIR/STTR Matching Grant Program as an entitlement program for small businesses. The program provides grants to County businesses that receive a federal SBIR/STTR Phase I or Phase II grant to conduct research in medicine, biotechnology, or life sciences. Since its start, the program has disbursed 38 awards totaling \$1,650,000 to 25 companies, matching \$34,357,086 in federal awards.

The County's SBIR/STTR Matching Grant Program is a part of the County's Economic Development Fund (EDF), which is administered by the Department of Finance in close coordination with the Montgomery County Economic Development Corporation (MCEDC). The EDF's mission is to assist private employers who are located, plan to locate, or substantially expand operations in the County. The SBIR/STTR Matching Grant Program was budgeted \$425,000 in the current and prior fiscal year.⁷

The purpose of Expedited Bill 31-22 is to change certain requirements of the SBIR/STTR Matching Grant Program that are currently written into County law to give Executive staff greater flexibility in administering the program.⁸

In June 2022, Executive staff sent recommendations to the PHED committee for improving the SBIR/STTR Matching Grant Program based on feedback from grant recipients and other program stakeholders. Bill 31-22 would allow Executive staff to implement these recommended changes in the near term and make future modifications to the program through Executive Regulation without requiring changes in law. The Council would retain authority to review and approve or disapprove the regulation before it goes into effect.⁹

Expedited Bill 31-22 was introduced to the Council on November 1, 2022.

In April 2022, OLO published a RESJIS for Zoning Text Amendment (ZTA) 22-02, Density and Height Limits, Parking – Biohealth, which considered racial inequities in economic development and the biohealth industry. OLO builds on ZTA 22-02's analysis for this RESJIS.

BIOTECH INDUSTRY AND RACIAL EQUITY

Government policies and practices have played a central role in creating and sustaining inequities in economic development by race and ethnicity, including within the biotechnology ("biotech") industry.¹¹ This RESJIS provides historical context and available data on racial inequities in the biotech industry and available data on the SBIR/STTR Program. Please refer to ZTA 22-02's RESJIS for more on the government's role in fostering racial inequities in economic development.

Inequities in Biotech Industry. The nation's history of inequitable health and health care by race predates its founding. European colonists exposed Indigenous people to smallpox and other diseases, devastating entire native populations. ¹² Enslaved Africans were also more susceptible to disease and death from inhumane treatment. ¹³ The medical community also exploited Black people through experimentation, fostering distrust in the medical system that lives today. ¹⁴ Post slavery, health care services remained segregated by race, with Black people only having sporadic access to deteriorated public hospitals. It was not until the passage of Medicare and Medicaid in the 1960s that Black, Indigenous, and Other People of Color (BIPOC) were able to access a wider range of health care facilities and services. ¹⁵

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Structural inequities in economic development, health, and health care are among the drivers of racial disparities that have characterized the biotech industry. Table 1 summarizes business ownership by race and ethnicity in the Professional, Scientific, and Technical Services sector in the DC metro area. This sector includes the Research and Development in Biotechnology industry. Table 1 demonstrates that White and Asian business owners are overrepresented among employer firms in the sector, while Black, Latinx, and Native American business owners are underrepresented.

Table 1: Percent of Adult Residents and Employer Firms in Professional, Scientific, and Technical Services Sector by Race and Ethnicity, Washington-Arlington-Alexandria, DC-VA-MD-WV Metro Area

Race and ethnicity	Percent of Residents 18 Years and Over	Percent of Employer Firms in Professional, Scientific, and Technical Services Sector (NAICS 54)
Asian	11.2	20.0
Black	24.5	8.8
Native American	0.6	0.3
White	46.8	71.5
Latinx	15.3	3.6

Source: 2020 Decennial Census (Table P3, P4), 2020 Annual Business Survey (Table AB2000CSA01), Census Bureau.

Further, educational and occupational segregation limit the participation of Black and Latinx people in Science, Technology, Engineering, and Mathematics (STEM) professions, including those within the biotech industry. Nationally, between 2017 and 2019:¹⁶

- Black people accounted for 11 percent of all jobs, 9 percent of STEM jobs, and 6 percent of life sciences jobs;
- Latinx people accounted for 17 percent of all jobs, 8 percent of STEM jobs, and 8 percent of life sciences jobs;
- Asian people accounted for 6 percent of all jobs, 13 percent of STEM jobs, and 19 percent of life sciences jobs;
 and
- White people accounted for 63 percent of all jobs, 67 percent of STEM jobs, and 65 percent of life sciences jobs.

A study of personnel in the biotech industry also found an under-representation of Black, Latinx and Indigenous employees and executives. The 2021 survey of 31 biotech firms found that:¹⁷

- Black people accounted for 6 percent of biotech employees and 3 percent of executives;
- Latinx people accounted for 7 percent of biotech employees and 4 percent of executives;
- Asian people accounted for 21 percent of biotech employees and 15 percent of executives;
- Native Americans, Hawaiians and Pacific Islanders accounted for 0.6 percent of biotech employees and 2 percent of executives; and
- White people accounted for 56 percent of biotech employees and 72 percent of executives.

Racial and ethnic disparities in STEM and biotech suggests BIPOC have less access to an industry with a large footprint in the region. The BioHealth Capital Region – which includes Maryland, the District of Columbia, and Virginia – employs over 100,000 workers and ranks fourth among U.S. biopharma hubs behind Boston, San Francisco, and New Jersey/New York. Consequently, BIPOC also have less access to higher wages offered by STEM occupations. Locally, residents working in computer, engineering, and science occupations had median earnings of \$107,279.

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Data on SBIR/STTR Program. Available data on SBIR and STTR programs suggests racial disparities in awards. Table 1 summarizes the percent of total dollars from SBIR and STTR programs awarded to Small Disadvantaged Businesses (SDB) during fiscal year 2019.²⁰ Table 2 demonstrates that SDBs received no more than 8 percent of total dollars across Phase I programs and no more than 5 percent of total dollars across Phase II programs. Of note, the County does not collect demographic information for the local SBIR/STTR Matching Grant Program.²¹

Table 2: Percent of Small Business Innovation Research (SBIR) and Small Business Technology Transfer
Total Dollars to Small Disadvantaged Businesses (SDBs)

Program and agency category	Percent of Total Dollars to Small Disadvantaged Businesses – Phase I	Percent of Total Dollars to Small Disadvantaged Businesses – Phase II
SBIR, civilian agencies	7.0	4.0
SBIR, defense agencies	7.0	5.0
STTR, civilian agencies	7.0	4.0
STTR, defense agencies	8.0	4.0

Source: SBIR-STTR Fiscal Year 2019 Annual Report, U.S. Small Business Administration.

ANTICIPATED RESJ IMPACTS

To consider the anticipated impact of Expedited Bill 31-22 on RESJ in the County, OLO recommends the consideration of two related questions:

- Who are the primary beneficiaries of this bill?
- What racial and social inequities could passage of this bill weaken or strengthen?

For the first question, OLO considered the demographics of potential SBIR/STTR Matching Grant Program recipients since they would be the beneficiaries of an improved program if the Bill works as intended. As mentioned in the prior section, the County does not collect data for program recipients. However, data on business ownership at the metro area level suggests White and Asian business owners are overrepresented in the sector containing the biotech industry. Personnel data suggests White and Asian people are also overrepresented among employees in STEM and biotech. Thus, improvements to the SBIR/STTR Matching Grant Program could disproportionately benefit White and Asian persons since they are overrepresented among biotech business owners and employees.

For the second question, OLO considered how the Bill could affect racial disparities in business ownership and employment in the local biotech industry. In general, the primary purpose of incentive programs such as the SBIR/STTR Matching Grant Program is to increase local economic growth through business investment and job creation.²²

Available data suggests White and Asian business owners are likely overrepresented among recipients of the SBIR/STTR Matching Grant Program. As such, the current program is possibly reinforcing racial disparities in the local biotech industry, since it is likely increasing investment in White- and Asian- owned businesses. Recommended program changes put forth by Executive staff do not appear to include any components for increasing Black- and Latinx-owned businesses among award recipients. Such components could include increasing outreach and support to existing Black- and Latinx-owned businesses or addressing structural inequities that could increase the representation of these businesses in the biotech industry.

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Taken together, OLO anticipates Expedited Bill 31-22 would not have a favorable impact on RESJ in the County. While the benefits of the Bill will primarily be experienced by White and Asian stakeholders, the relative value of these benefits are unlikely to impact racial or ethnic disparities in biotech business ownership or among biotech employees. As such, despite expected changes to the SBIR/STTR Matching Grant Program by Executive staff, the program will likely continue to reinforce racial disparities in the local biotech industry.

RECOMMENDED AMENDMENTS

The Racial Equity and Social Justice Act requires OLO to consider whether recommended amendments to bills aimed at narrowing racial and social inequities are warranted in developing RESJ impact statements.²³ OLO finds Expedited Bill 31-22 could have a neutral impact on RESJ in the County in that it would neither narrow nor widen existing racial disparities in the local biotech industry. As such, OLO does not offer recommended amendments. However, if the Council would like to improve the RESJ impact of the SBIR/STTR Matching Grant Program, OLO offers two items for consideration:

- Require the collection of race and ethnicity data for the SBIR/STTR Matching Grant Program. Collecting race
 and ethnicity data for award recipients would give a baseline understanding of potential racial and ethnic
 disparities in the program that could be used to develop future Executive Regulations for the program aimed at
 advancing RESJ in the County.
- Adopt amendments originally recommended for Zoning Text Amendment 22-02. These include collecting and reporting biotech workforce data by race, ethnicity and gender as well as investing in workforce development opportunities for BIPOC residents and in local small businesses, especially underrepresented BIPOC small businesses.

CAVEATS

Two caveats to this racial equity and social justice impact statement should be noted. First, predicting the impact of legislation on racial equity and social justice is a challenging analytical endeavor due to data limitations, uncertainty, and other factors. Second, this RESJ impact statement is intended to inform the legislative process rather than determine whether the Council should enact legislation. Thus, any conclusion made in this statement does not represent OLO's endorsement of, or objection to, the bill under consideration.

¹ Definition of racial equity and social justice adopted from "Applying a Racial Equity Lens into Federal Nutrition Programs" by Marlysa Gamblin, et.al. Bread for the World, and from Racial Equity Tools. https://www.racialequitytools.org/glossary

³ "About," SBIR-STTR America's Seed Fund, U.S. Small Business Administration, Accessed November 7, 2022. https://www.sbir.gov/about

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- ¹¹ Biotechnology or biotech is technology that utilizes biological systems, living organisms or parts of this to develop or create different products. New technologies and products are developed every year within the areas of medicine, agriculture or industrial biotechnology. For more, visit: https://www.ntnu.edu/ibt/about-us/what-is-biotechnology.
- ¹² Kristine B. Patterson and Thomas Runge, "Smallpox and the Native American," The American Journal of the Medical Sciences, April 1, 2002. https://pubmed.ncbi.nlm.nih.gov/12003378/
- ¹³ W. Michael Byrd and Linda A. Clayton, "Race, Medicine, and Health Care in the United States: A Historical Survey," Journal of the National Medical Association, March 2001. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2593958/
- ¹⁴ Harriet Washington, *Medical Apartheid: The Dark History of Medical Experimentation on Black Americans from Colonial Times to the Present* (Doubleday, 2007)
- 15 Ibid
- ¹⁶ Richard Fry, Brian Kennedy, and Cary Funk, "STEM Jobs See Uneven Progress in Increasing Gender, Racial, and Ethnic Diversity," Pew Research Center, April 1, 2021. https://www.pewresearch.org/science/2021/04/01/stem-jobs-see-uneven-progress-in-increasing-gender-racial-and-ethnic-diversity/
- ¹⁷ "Measuring Diversity in the Biotech Industry: Tracking Progress in Small and Large Companies," BIO/Coqual, June 2022. https://go.bio.org/rs/490-EHZ-999/images/2022%20Key-Findings.pdf? ga=2.264168652.1980895358.1668447240-1672824493.1668447240
- ¹⁸ Alex Philippidis, "Top 10 U.S. Biopharma Clusters," Genetic Engineering & Biotechnology News, June 3, 2022. https://www.genengnews.com/topics/drug-discovery/top-10-u-s-biopharma-clusters-9/
- ¹⁹ Table S2411: Occupation by Sex and Median Earnings in the Past 12 Months for Montgomery County, 2021 American Community Survey 1-Year Estimates, U.S. Census Bureau.
- ²⁰ Small Disadvantaged Business (SDB) is a federal designation for small businesses that register as: (1) being 51% or more owned and controlled by one or more disadvantaged persons; (2) disadvantaged person or persons must be socially disadvantaged and economically disadvantaged; and (3) being small, according to SBA's size standards. Socially disadvantaged persons include members of racial and ethnic minority groups. For more, visit: https://www.sba.gov/federal-contracting/contracting-assistance-programs/small-disadvantaged-business
- ²¹ "Review: SBIR/STTR Matching Grant Program and Biotechnology Investor Incentive Tax Credit Supplement," Memorandum from Gene Smith, Legislative Analyst, to Planning, Housing, and Economic Development (PHED) Committee, Montgomery County Council, July 7, 2021.

https://www.montgomerycountymd.gov/council/Resources/Files/agenda/cm/2021/20210712/20210712 PHEDAM1.pdf ²² Ibid

²³ Bill 27-19, Administration – Human Rights – Office of Racial Equity and Social Justice – Racial Equity and Social Justice Advisory Committee – Established, Montgomery County Council

⁴ SBIR-STTR Annual Report Fiscal Year 2019, U.S. Small Business Administration. https://www.sbir.gov/sites/default/files/SBA Final FY19 SBIR STTR Annual Report.pdf

⁵ "Continuation of SBIR/STTR Matching Grant Program Review," Memorandum from Gene Smith, Legislative Analyst, to Planning, Housing, and Economic Development (PHED) Committee, Montgomery County Council, October 12, 2022. https://www.montgomerycountymd.gov/council/Resources/Files/agenda/cm/2022/20221017/20221017 PHED1.pdf

⁶ "Continuation of SBIR/STTR Matching Grant Program Review," Memorandum from Yaakov "Jake" Weissmann, Assistant Chief Administrative Officer to PHED Committee Chair

⁷ "Economic Development Fund," Montgomery County Operating Budget, Accessed November 7, 2022. https://apps.montgomerycountymd.gov/basisoperating/Common/Department.aspx?ID=EDF

⁸ Expedited Bill 31-22, Finance – Economic Development Fund - Small Business Innovation Research and Small Business Technology Transfer Matching Grant Program, Montgomery County Council, Introduced November 1, 2022. https://www.montgomerycountymd.gov/council/Resources/Files/agenda/col/2022/20221101/20221101 9C.pdf

⁹ "Continuation of SBIR/STTR Matching Grant Program Review"

¹⁰ RESJIS for ZTA 22-02, Office of Legislative Oversight, Montgomery County, Maryland, April 26, 2022. https://montgomerycountymd.gov/OLO/Resources/Files/resjis/ZTA/2022/ZTA22-02.pdf