

FINAL

AECOM



Tech Firm Community Commitments Study

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Executive Summary

The purpose of this report is to understand commitments that large-enterprise technology firms like Intel, Google, Apple, and others have made to communities where they have located new headquarters and/or manufacturing facilities. This report details the methodology AECOM used to identify relevant firms and their commitments and provides in-depth information on relevant topics such as deal structure, company follow-through, and funding sources. The report summarizes five case studies and combines them with the research on other relevant community commitments across the nation, providing key takeaways on deal structure and “best practices” for negotiating such deals.

The impetus behind this study was the Intel Corporation’s decision to locate a major chip fabrication operation in Licking County, OH, and the commitments it has made to Central Ohio communities thus far following the announcement of their plans in 2022. The company has made some broad commitments to supporting Ohio universities, stating in 2022 that the company intends to provide a \$50 million grant to universities to build upon the study of semiconductor manufacturing.¹

This research demonstrates that the most impactful community commitments typically involve comprehensive, ongoing efforts to not only mitigate any negative externalities caused by the decision to locate in the community (e.g., rising housing costs/pressure on housing supply, environmental impacts, etc.), but go a step further and provide positive community co-benefits, beyond job creation and economic multiplier effects. These types of ongoing commitments help build trust and deepen the relationship between the firm, their host community, and other community organizations. They also create positive cycles of mutual benefit and synergies for other connected industries that can attract additional private investment to the community.

Methodology

AECOM built a summary database, included as an appendix to this report, tracking major community commitments/pledges by large-enterprise tech firms

within the last five years. The database contains the following:

- Tech firm name
- City/region
- Date of commitment
- Short qualitative description of commitment type/details; whether a local match or other commitment by the community or partner organizations was made as part of the deal, etc.
- Total amount and structure of funding committed/pledged.
- Total amount of in-kind resources committed/pledged.
- Amount delivered to date and schedule of future funding.
- Local partners involved (state and regional entities, other businesses, non-profits, etc.)
- Matching information (if any organizations provided a “match” to the commitment by the tech firm, and if so, how much, description of requirements, etc.)
- Total amount of economic incentive packages provided by states, non-profit organizations, and other entities, if known
- Qualitative description/notes on economic incentive timeline, funding sources, etc.
- Sources

This database is organized from largest to smallest commitments in terms of total dollar value/resources committed. Each commitment is categorized according to the nature of the commitment – for example, Affordable Housing denotes an investment in affordable housing development, or Workforce Development represents an investment in job training programs, etc. The database can be found in the Appendix of this report.

Research into these commitments focused on how deals were structured, what incentives were involved, and who benefited from these commitments. To best represent the true impacts of these commitments, an objective research approach reveals both the positives and negatives associated with each community commitment.

In total, AECOM identified 39 examples (several are multiple commitments by the same firm) for inclusion in the database, based on order of magnitude in total value/dollar amount, relevance to the study, available information, etc. From this list, AECOM selected eight case studies based on the size of commitment, availability of information, uniqueness of commitment, and the potential pitfalls or implications that arise from incentive deals.

¹ <https://www.intel.com/content/www/us/en/newsroom/news/intel-invests-100m-ohio-national-education.html#gs.3pglut>

Data Sources

To AECOM's knowledge, no comprehensive database tracking either public economic incentive packages granted to firms, nor commitments to communities by major private organizations, currently exists. AECOM's research relied heavily on news articles, press releases, and company and community websites. Companies will typically issue a press release detailing their community commitments to generate publicity; however, there are few "unbiased" sources for this type of information. As a potential next step, it is recommended that Central Ohio economic development leaders consider options for developing a centralized database that more closely tracks both economic incentives and community commitments by the private sector.

Case Studies

The case studies selected represent some of the largest community commitments by major technology ("tech") firms, along with two smaller commitments that shine a different light on corporate philanthropy. The largest commitments were those by the largest tech companies: Apple, Microsoft, and Google, and Intel. These companies primarily focused their commitments within the West Coast cities they inhabit. To provide a more nuanced look into the world of corporate philanthropy, Charter Communications in Hartford, Connecticut, General Electric in Boston, Massachusetts, Micron in Onondaga, New York, and Dell in Austin, Texas, were also selected for further study.

Intel

Intel is a multinational technology company and is one of the world's largest semiconductor manufacturers. A key component of the rise of the Silicon Valley in the mid-to-late 1900s, Intel ranks amongst the most familiar names in IT, along with Apple, Google, Microsoft, and others. For nearly 60 years, Intel has been headquartered in Santa Clara, California, and as of 2022, employs over 130,000 employees.

In January 2022, Intel announced plans to construct a new semiconductor manufacturing facility in

Licking County, Ohio, totaling to an investment of upwards of \$20 billion.² As the largest single private-sector investment in Ohio history, this project is estimated to generate 3,000 Intel jobs, with 7,000 construction jobs over the course of construction, and is likely to support thousands of additional indirect jobs. At the time of the announcement, Intel pledged "an additional \$100 million toward partnerships with educational institutions to build a pipeline of talent and bolster research programs in the region".³ Since this announcement, Intel has issued a \$50 million research and workforce development grant in Ohio. As per a report from Intel in March 2022,⁴ Intel will invest \$50 million over the next decade directly in Ohio higher education institutions, while an additional \$50 million from Intel will be matched by \$50 million from the U.S. National Science Foundation in national funding opportunities. Intel's original press release in January 2022 pledged \$100 million towards Ohio higher education institutions, but the March 2022 press release clarified that commitments consist of \$50 million for Ohio, and \$100 million (including the U.S. National Science Foundation match) for nationwide funding. While it may seem like Intel has reduced their original commitment to Ohio-specific initiatives, it is likely that even national funding for semiconductor research will generate positive impacts in Central Ohio. A national boom in semiconductor manufacturing and research will have positive effects on all areas involved in the industry, including Columbus. Furthermore, it is likely that Intel's Central Ohio facility could recruit from nationwide programs as well as from programs within Ohio, attracting national talent while retaining local talent.

In September 2022, Intel disbursed the first round of funding from the planned \$50 million, granting \$17.7 million in funding over three years to eight projects by leading institutions in Ohio: University of Cincinnati, Central State University, Columbus State Community College, Kent State University, Lorain County Community College, Ohio University, and two separate disbursements to The Ohio State University. This \$17.7 million is estimated to provide over 2,300 scholarships, and to assist in the education of over 9,000 students.⁵

Because Intel's announcement is relatively recent, it is too soon to measure outcomes of their commitment in Central Ohio. The following

²<https://www.intel.com/content/www/us/en/newsroom/news/intel-announces-next-us-site-landmark-investment-ohio.html#gs.3xm69m>

³<https://www.intel.com/content/www/us/en/newsroom/news/intel-announces-next-us-site-landmark-investment-ohio.html#gs.4m1b67>

⁴<https://www.intel.com/content/www/us/en/newsroom/news/intel-invests-100m-ohio-national-education.html#gs.3xmi95>

⁵<https://download.intel.com/newsroom/2022/manufacturing/Ohio-Fact-Sheet-Education.pdf>

subsections describe how Intel has impacted communities where it has previously located major operations, including Chandler, Arizona, and Hillsboro, Oregon.

Intel in Chandler, AZ

Intel's campus in Chandler includes three existing semiconductor manufacturing facilities, with two additional facilities planned for 2024. The first of these facilities broke ground in 2002. Per a report by Intel, Intel is the largest employer in Chandler, with over 13,000 employees, generating an estimated annual economic impact of \$8.6 billion.⁶ Notably, Intel's campus in Arizona invests in on-site alternative energy, and meets 100% of their Arizona energy use (including purchases of green power from utility suppliers and green attributes from multiple sources). Additionally, Intel has shown a commitment to community-based water restoration projects in multiple regions around the country. In Arizona, Intel's contributions result in the restoration of 2.2 billion gallons annually. Finally, since 2018, Intel has supported Arizona schools and nonprofits with over \$35 million in charitable donations.

It is assumed that a sizeable share of Chandler's growth over the last several decades is closely tied to Intel's. In 1980, before Intel broke ground at Chandler Boulevard,⁷ the city's population was barely 30,000. In just the first 10 years of Intel's arrival, the city's population grew to 90,000, and by 2000, it had redoubled to 180,000⁸. Similarly, the House Price Index for the Phoenix-Mesa-Chandler MSA rose from 65.2 in 1980 to 88.7 by 1990. For context, the House Price Index for the MSA had risen to 310.1 in 2020.⁹

Intel in Hillsboro, OR

Intel has six semiconductor manufacturing facilities in Hillsboro, with the first facility starting production in 1996. According to an Intel report released in 2023,¹⁰ Intel currently employs over 22,000 people in Oregon, and generates an estimated \$19.3 billion impact. Similar to its Arizona model, Intel's facilities in Oregon also invest in on-site alternative energy, achieving 100% renewable electricity use. Additionally, Intel's funding for community-based water restoration projects has restored 960 million

gallons of water in Oregon. Since 2018, Intel has supported Oregon schools and nonprofits with over \$40 million in charitable contributions.

Intel's expansion in Hillsboro has boosted the city's growth – In 1970, before Intel began construction in Hillsboro, the city's population stood at 15,000. Intel broke ground in Aloha in 1976, and then Hillsboro in 1982,¹¹ and by 1990, the city's population had more than doubled, crossing 37,000. For context, the city's population stood at 108,000 in 2020.¹² In April 2022, Intel announced a new \$3 billion expansion of its Hillsboro facilities, driving Intel's total investments in Oregon up to over \$55 billion.

Intel's ventures in Arizona and Oregon are long-standing – beginning decades before the turn of the 21st century. At the time, significant incentives / community commitments were rare – the job creation, consumer spending, and increased taxation these companies would generate was often seen as “enough” by local communities.

Apple

Apple is one of the most recognized and profitable companies in the U.S. The company is well known for its computer products, software, smart phones, and other services. Apple has called Cupertino, California home for thirty years, drawing many tech workers to the area for decades.

In 1997, Apple was virtually bankrupt when it negotiated a deal with the city of Cupertino to keep its headquarters in the city. In return, Apple would get “half of Cupertino's share of sales tax revenue generated by the company's sales to businesses in California for at least five years”.¹³ According to local officials, the company is still getting sales-tax rebates over twenty years later; however, specifics related to these arrangements are kept confidential.¹⁴ In 2013, Apple and Cupertino renegotiated their deal to get approval for their new headquarters. The company now receives a 35% rebate of the city's sales tax revenue on its sales of devices to businesses within California.¹⁵

The single largest dollar-value community commitment identified as part of this study was

⁶ <https://www.intel.com/content/www/us/en/corporate-responsibility/intel-in-arizona.html>

⁷ Here, “broke ground” refers to any Intel operational presence – not just semiconductor manufacturing.

⁸ https://www.eastvalleytribune.com/local/chandler/chandlers-upscale-growth-tied-to-intel/article_eff95a9b-65cc-5670-9c49-05cbf9265b3a.html

⁹ <https://fred.stlouisfed.org/series/ATNHPIUS38060Q>

¹⁰ <https://www.intel.com/content/www/us/en/corporate-responsibility/intel-in-oregon.html>

¹¹ Again, these figures refer to Intel's operational presence, and just semiconductor manufacturing presence.

¹²

<https://www.oregonmetro.gov/sites/default/files/2014/05/18/CityPopulation1960toPresent.pdf>

¹³ <https://news.bloombergtax.com/daily-tax-report-state/apples-22-year-tax-break-part-of-billions-in-california-bounty>

¹⁴ Ibid.

¹⁵ Ibid.

made by Apple in 2020. The company started with a \$400 million investment in 2020 before committing an additional \$1 billion in 2021 and another \$1.1 billion in both 2022 and 2023, for a total commitment of \$2.5 billion across a diverse array of projects. A statement released in the summer of 2020 stated, “as cities and states have been forced to pause many of their long-term affordable housing investments amidst the current public health crisis, Apple is proud to continue moving forward with our comprehensive plan to combat the housing crisis in California.”¹⁶

The first injection of \$400 million supported thousands of Californians with first-time homebuyer assistance or new affordable housing units in 2020. Later in the same year, the company partnered with the Housing Trust Silicon Valley to create more than 250 new units of affordable housing across the Bay Area. In the Association of Bay Area Governments’ Regional Housing Needs Allocations Plan in 2021, it was determined that the Bay Area needs approximately 441,000 additional housing units.¹⁷

Additionally, Apple partnered with the California Housing Finance Agency (CalHFA) to create a mortgage and down payment assistance fund. The company is also supporting the construction of new affordable units through a partnership with Destination: Home, a San Jose-based non-profit that is working to end homelessness in Silicon Valley.¹⁸

This partnership with area non-profits has helped fund the construction of over 1,000 new units of ‘deeply’ affordable and supportive housing for the community’s most vulnerable populations across the Silicon Valley.¹⁹ These efforts include units developed specifically for seniors and other groups that are facing disproportionate threats to stable housing. With Apple’s support, Destination: Home expanded its impact by 67% in 2020 by helping prevent 1,500 families from losing their homes.

One commendable aspect of Apple’s community commitment strategy is that the firm tends to craft their commitment to relate to the specific needs in the community. Veteran’s Square, located in Pittsburg, California is a multifamily residential development for both veterans and individuals who have been identified as having the greatest need for housing. Apple’s commitment to this facility includes

funding a position for a service coordinator. The service coordinator acts as a counselor and friendly face to residents at the complex – ensuring they are cared for and adjusting to their new home.²⁰ Although the overall investment for this specific initiative was relatively modest, it shows Apple’s tailored approach to investing in the community.

The breakdown of Apple’s \$2.5 billion affordable housing commitment is as follows:

- The creation of a \$1 billion affordable housing investment fund with the State of California
- Funding a \$1 billion first-time homebuyer mortgage assistance fund, with increased funding opportunities for essential services personnel, school employees, and veterans
- Making \$300 million in Apple-owned land available for affordable housing development
- Developing a public-private partnership with Housing Trust Silicon Valley through a \$150 million Bay Area housing fund
- Donating \$50 million to support Destination: Home’s efforts to address homelessness in Silicon Valley

Housing advocates and experts note that Apple’s commitment to affordable housing is much needed and admirable but find it to be lacking when it comes to addressing the root of the issue; the sentiment that the presence of large tech firms within Silicon Valley have significantly exacerbated the affordability of housing within the region. The highly paid employees hired by Apple and other Silicon Valley companies are able to afford to pay large sums for housing in a constrained housing market, exacerbated by the slowing pace of new housing construction.²¹

Additionally, Apple’s Cupertino “Spaceship” campus houses 12,000 corporate employees with no connections to public transit lines or additional employee housing.²² This condition places major strain on housing outside of Cupertino as supply diminishes, requiring workers to purchase homes farther and farther from Apple’s campus.

Other companies, such as Google and Facebook, which have similarly sized campuses to Apple’s, have incorporated both housing and car-free transportation options for employees. Ultimately, many housing experts agree that the largest barrier

¹⁶ <https://www.apple.com/newsroom/2020/07/apple-allocates-more-than-400-million-to-combat-california-housing-crisis/>

¹⁷ <https://abag.ca.gov/tools-resources/digital-library/final-rhna-methodology-report-2023-2031-update-11-22.pdf>

¹⁸ <https://destinationhomesv.org/>

¹⁹ <https://www.apple.com/newsroom/2020/07/apple-allocates-more-than-400-million-to-combat-california-housing-crisis/>

²⁰ <https://9to5mac.com/2022/07/25/apple-california-affordable-housing-fund/>

²¹ <https://www.bloomberg.com/news/articles/2019-11-05/why-apple-is-investing-2-5-billion-in-housing>

²² *Ibid.*

to housing in the region is not capital, but political will. One-time investments are good in the short-term, but it will require greater public-private partnerships to address the affordable housing scarcity in the region.

According to Kate Downing, a former planning commissioner in Palo Alto, the Bay Area's housing problems are "...the result of an 'artificial scarcity' due to excessive single family housing zoning and a distinct lack of multifamily housing options."²³ This type of red tape has hindered affordable housing development in the region for decades and will continue to do so after one-time cash injections from major companies are used up. "If a company really wanted to make a difference with respect to housing, they'd put money towards supporting local and state level politicians who believe that the path to affordability and environmental sustainability lies in building housing next to existing job centers."²⁴

Microsoft

Microsoft is one of the most recognizable computer brands in the world. The company's products can be found in workplaces, classrooms, and homes across the globe. Microsoft has been present in the Seattle metropolitan region since 1986, moving to Redmond, Washington shortly after the company became publicly traded. Since then, the campus has grown significantly, and has had a significant impact on the greater Seattle region.

Microsoft has engaged in a practice dubbed personally by Bill Gates as "creative capitalism" when it comes to paying taxes. For decades, the company has found credits and loopholes in the states they do business to pay less in taxes and even get millions back in rebates.²⁵ In Washington alone, the company has received \$753,465,220 in credits and rebates, amounting to tens of millions each year.²⁶ The local impacts of this practice should be considered when evaluating their overall impact on the communities where they have a presence, as these unpaid tax dollars would typically be used for broader community benefits.

Microsoft began their commitment to affordable housing in the Puget Sound/Seattle region in early 2019. In a press release, the company noted that the region has experienced a steady increase in the number of jobs, but only a very slow increase in

housing construction across the region. Thus, housing for lower- and middle-income residents of the region has become significantly constrained in the past decade. In 2019, Microsoft committed \$500 million to advance affordable housing solutions through loans and grants to accelerate the construction of more affordable housing across the region. This lump sum was broken down as follows:

- \$225 million at lower than market rate returns to inject capital to subsidize the preservation and construction of middle-income housing - these investments were focused in six cities east of Seattle, closest to Microsoft's headquarters
- \$250 million at market rate returns to support low-income housing across the entire King County region - this was invested under the belief that additional capital at market lending rates could help accelerate the construction of low-income housing across the entire region
- \$10 million in philanthropic grants to address homelessness in the greater Seattle region - \$5 million towards the Homa Base Program, the United Way of King County, and the King County Bar Association (assisting with eviction legal aid), and \$5 million towards a new joint agency on homelessness, formed by the city of Seattle and King County.

Microsoft's housing investment decision came less than a year after Amazon successfully pushed to block a new tax in Seattle that would have made large businesses pay a per-employee tax to fund homeless services and the construction of affordable housing.²⁷

The rapid growth of the tech industry and the increase in inequality across multiple socioeconomic metrics that often follows has led to concerns across the country toward the decreasing affordability of housing, particularly in major tech hubs. For metro areas such as Seattle, even software developers in high-paying jobs are getting priced out of neighborhoods. Redfin found that for five of the six cities where Microsoft is directing its investment in middle-income housing, less than 30% of homes are affordable on the typical salary for a software development engineer at Microsoft – and less than 20% are affordable for households earning the median income for King County.²⁸

²³ Ibid

²⁴ Ibid

²⁵ <https://crosscut.com/2008/02/microsofts-528-million-washington-tax-break>

²⁶

https://subsidytracker.goodjobsfirst.org/?parent=microsoft&order=sub_year&sort=

²⁷ <https://www.nytimes.com/2019/01/16/technology/microsoft-affordable-housing-seattle.html>

²⁸ <https://www.redfin.com/news/microsoft-housing-pledge-affordability-redmond-engineers/>

Microsoft's commitment is unique, in that the company not only invested in grants for low- to middle-income housing but also partnered with mayors of neighboring towns to address other barriers to affordable and workforce housing. These mayors committed to "up-zoning", or relaxing zoning rules to allow developers to build structures at a higher unit-per-acre density. Specifically, areas that have been targeted for up-zoning are those that are near current public transit stops as well as planned public transit. Additionally, these mayors promised to streamline permitting for low-income housing.²⁹

Microsoft's strategic partnerships with mayors of neighboring towns is a significant step up from simply injecting a lump sum donation towards affordable housing development, as this has more long-term benefits towards creating and preserving low- and middle-income housing for the region. Simply allowing developers to concentrate units near public transit stops is a key component in reducing the impact of tech companies on area housing markets.

Google

Sometimes referred to as "the most powerful company in the world," Google has solidified its place in history as the most popular search engine. The company is involved in a variety of tech areas, including smartphones, data analytics, artificial intelligence, cloud computing, and more. Since 1994, Google has had its 'Googleplex' headquarters in Mountain View, California.

Google/parent company Alphabet, has received nearly three quarters of a billion in subsidies since the year 2000, a majority of which come from states outside of their home state of California.³⁰ The deals that the company has made within the state have been kept confidential, a strategy that Google has implemented across the US when forming deals with local governments.³¹

In the summer of 2019, Google issued an announcement stating that the company will invest \$1 billion for 20,000 homes in the Bay Area; this is significant, especially compared with the much smaller magnitude of Apple's commitments to affordable housing in the Bay Area. Three quarters of that investment comes from a repurposing of

Google owned land over ten years, most of which is currently zoned for office or commercial space, as residential housing.³² The company estimates that this will support the development of at least 15,000 new homes at all income levels in the Bay Area.

Google is also seeking to establish a \$250 million investment fund to provide incentives to developers to build at least 5,000 affordable housing units across the market. The company is also giving \$50 million in grants to non-profits focused on homelessness and displacement. Like Microsoft, Google has sought to work with local municipalities to support plans that ease restrictions on residential development. The company is seeking to get housing construction started immediately for homes to become available soon.³³

In June of 2023, Google released an update on their progress. Over the past four years, the company has allocated \$133 million of the \$250 million affordable housing investment towards 3,800 units across 29 affordable housing projects, including nearly 2,000 units under construction – adding to the more than 2,000 modular homes underway or completed.³⁴

Google's partnerships with elected officials to rezone \$750 million of the company's land created the opportunity to build 12,900 units as part of a mixed-use development in San Jose and Mountain View.

Google developed a master plan for the North Bayshore neighborhood in Mountain View, California. This plan was prepared by the company in partnership with LendLease, a construction and real estate company. The project calls for the demolition of all buildings and improvements in the neighborhood to develop the following:

- 7,000 residential units
- 26 acres of public parks and open space
- 233,990 square feet of retail uses
- 55,000 square feet of community facilities
- 3.14 million square feet of office space
- New public and private streets with bicycle and pedestrian improvements
- A private utility system.³⁵

The Mountain View City Council approved Google's North Bayshore Master Plan on June 13, 2023, as it aligned with the City's existing North Bayshore Precise Plan, approved in 2015. The company

²⁹ <https://www.vox.com/future-perfect/2019/1/23/18193380/microsoft-affordable-housing-500-million-seattle>

³⁰ https://subsidytracker.goodjobsfirst.org/?company_op=starts&company=Alphabet&order=sub_year&sort=

³¹ <https://www.latimes.com/business/la-fi-google-tax-breaks-20190219-story.html>

³² <https://blog.google/inside-google/company-announcements/1-billion-investment-bay-area-housing/>

³³ Ibid.

³⁴ <https://blog.google/inside-google/company-announcements/google-bay-area-housing-update/>

³⁵ <https://www.mountainview.gov/our-city/departments/community-development/planning/active-projects/google-projects/north-bayshore-master-plan>

submitted the master plan application to the City in 2021, and since then has worked closely with the community and the City to inform the plan.³⁶ The company hosted more than 60 meetings with hundreds of community members with the intent of creating three neighborhoods that reflect the community's interests for years to come.³⁷

Google's financial commitment and regional partnerships are noteworthy, but some housing advocates are calling for large tech companies to think on a broader scale. Critics argue that large tech companies have the political influence to do more to advocate for better laws to increase construction.³⁸ These companies could also pressure state lawmakers to create permanent funding for affordable housing rather than a disjointed patchwork of bond measures and other temporary supports. According to a 2019 report, the Bay Area has added about 676,000 jobs and only 176,000 housing units from 2011 to 2019.³⁹ This discrepancy has led some to blame companies like Google for continuing to grow its workforce with little regard to the impact it is having on the Bay Area.

General Electric

General Electric (GE) has been in operation since 1892, making it the oldest company on the list of major tech firm community commitments. GE is a Fortune 500 company that has historically focused upon appliances, electrical generation, and other products. The company was originally founded in Schenectady, New York before moving to New York City and later Fairfield, Connecticut before deciding to move once more.

In 2016, General Electric decided to move their headquarters to Boston from Fairfield, Connecticut. To further entice the company, State agencies and the City of Boston collaborated to offer the company millions of dollars in incentives, including special access to the Logan International Airport and assistance for GE workers to relocate to Boston.⁴⁰ The City of Boston gave \$25 million to GE through property tax incentives in addition to \$250 million in infrastructure investments. These included site

improvement projects (\$120 million) and a bridge renovation and transit upgrades (\$125 million).⁴¹

Shortly after the company named Boston as the location for their new headquarters, GE committed \$50 million to Boston-based initiatives. These included investments in the local schools, STEM programs, and \$15 million towards expanding capacity at community health centers.⁴² These investments were targeted to primarily benefit underserved communities – particularly through the healthcare centers donation. The philanthropic arm of GE announced that it would support 22 Boston-area community health centers by providing training in the use of technology, increased access to specialty care, and leadership skills.⁴³

Two years later, the company decided to downsize its headquarters considerably. Initially, the company had received incentives for the 800 jobs that would be added with the move, but instead the company decided to downsize to 250 employees at the location, making GE responsible for reimbursing \$87 million in grants and incentives the company received from the Commonwealth of Massachusetts.⁴⁴ The company also pledged to finish developing the planned public spaces on the property which include a walking area and a public dock. According to state representatives, the company fully reimbursed the amount they received as part of the initial incentive package.⁴⁵ This should serve as a benchmark/model for other communities; it is recommended that the costs/benefits of incentives be measured and tracked after award, to ensure that the “return on investment” of public dollars to communities are making the initial incentive packages a truly worthwhile investment.

Charter Communications

Charter Communications is an American mass media company, currently branded as “Spectrum,” providing cable and telephone services to customers in 41 states. The company was founded in Michigan in the 1980s and quickly rose in the ranks as a telecommunications company through mergers and acquisitions.

³⁶ <https://realestate.withgoogle.com/northbayshore/>

³⁷ <https://blog.google/inside-google/company-announcements/google-bay-area-housing-update/>

³⁸ <https://www.fastcompany.com/90531798/the-tech-industry-exacerbated-the-housing-crisis-heres-what-google-is-doing-to-fix-it>

³⁹ <https://www.nytimes.com/2019/06/18/technology/google-1-billion-housing-crisis.html>

⁴⁰ <https://www.urban.org/urban-wire/massachusetts-gave-ge-mega-deal-move-did-it-matter>

⁴¹ Ibid.

⁴² <https://www.ge.com/news/press-releases/ge-commits-50m-empower-bostons-students-build-capabilities-careers-and-improve>

⁴³ Ibid.

⁴⁴ <https://www.wcvb.com/article/general-electric-scrap-plans-for-new-headquarters-building-will-reimburse-state-for-incentives/26344043#>

⁴⁵ Ibid.

In 2012, Charter Communications designated Stamford, CT as its U.S. headquarters, and further increased its presence in the city by expanding its headquarters in 2017, adding 1,100 jobs to the local economy. The State of Connecticut provided a \$10 million low-interest loan to support this growth through the State's First Five Plus Program.⁴⁶ This funding was used to purchase new equipment and leasehold improvements. Additionally, the company qualified for another \$10 million in tax credits through the State's Industrial Sites Reinvestment Tax Credit program, with further credits available should the company exceed job targets.⁴⁷ The company utilized these credits to significantly redevelop their campus. The new campus includes a two-story food hall, three 24/7 self-serve markets, a coffee shop, and an outdoor amphitheater.⁴⁸

In March of 2023, Charter Communications announced its Spectrum Community Center Assist (SCCA) program would expand in 15 new locations. The SCCA program began two years prior with a five-year lifespan, meant to invest in 100 community centers and job training programs in underserved communities across the company's footprint throughout the United States.⁴⁹ Within Stamford, the company has contributed to the Community Action Agency in the South End of the City. The company invested \$50,000 in the agency towards job skills training for low-income individuals and new laptops to support the Agency's training programs.⁵⁰ Coupled with these donations, Spectrum employees donated volunteer hours towards repainting a local community center and installing a new classroom for the facility.

Community centers have been shown to improve health outcomes and are essential to supporting the health of people of all abilities, ages, socio-economic backgrounds, and ethnicities.⁵¹ Charter Communication's community center assistance program provides co-benefits for both the company and the community. In the wake of the COVID-19 pandemic, workforce development and job training programs are sorely needed, as more than two in five adults reported that their families suffered a job or income loss because of the economic impact of COVID-19. These losses have disproportionately affected Black and Hispanic or Latin American

adults, leading to challenges in meeting basic needs like rent.⁵²

To combat these disparities and ensure that workforce development programs are effectively and equitably supporting populations in need, the Urban Institute recommends using a place-based approach. This type of approach customizes programs to the needs and strengths of a specific community and location while addressing the structural and systemic barriers preventing families and individuals from achieving financial security.⁵³ Simply focusing on teaching and equipping workers with "in-demand skills" as the key to labor market success does not account for the goals of equity and overcoming the systemic barriers to their success. The Aspen Institute, which conducts research on workforce development, has some innovative suggestions for how to "rethink" workforce development:

- **Solidarity – Workforce Development** programs often treat workers as collections of problems that need fixing— low skills, no credentials, bad credit, etc. Workers need to be treated as human beings with unique experiences who are engaged and connected.
- **Data & Partnerships – Data analysis** on job patterns focuses on identifying only the "good" jobs in a region and leads workforce development programs to compete to place people into a limited number of good jobs. An alternative could be to partner with large employers to embed trainees within departments with equity gaps, thereby providing a direct path to a career for a new employee and addressing equity gaps within the company.⁵⁴

Major companies like Charter Communications have the ability and the means to invest in equitable and forward-thinking workforce development programs that go beyond simply buying laptops and providing brief training sessions. When states issue incentives to major companies to build out their workforce, the community benefits economically from the creation of new white-collar jobs. However, this does not account for the many blue collar and low-income households who likely will not directly experience the benefit of these companies moving to their

⁴⁶ <https://portal.ct.gov/Malloy-Archive/Press-Room/Press-Releases/2017/10-2017/Gov-Malloy-and-Charter-Communications-Announce-Charter-Plan-to-Build-New-Headquarters-Add-Jobs>

⁴⁷ Ibid.

⁴⁸ <https://www.nexttv.com/news/charter-opens-new-connecticut-headquarters>

⁴⁹ <https://corporate.charter.com/newsroom/charter-announces-30-million-spectrum-community-assist-initiative-to-revitalize-local-community-centers-and-invest-in-job-training-programs>

⁵⁰ <https://www.stamfordadvocate.com/local/article/Painting-with-purpose-Charter-Communications-16636030.php#photo-21735621>

⁵¹ <https://www.nrpa.org/our-work/Three-Pillars/role-of-parks-and-recreation-on-health-and-wellness/>

⁵² <https://www.urban.org/urban-wire/place-based-workforce-development-strategies-can-support-equitable-covid-19-recovery>

⁵³ Ibid.

⁵⁴ <https://www.aspeninstitute.org/blog-posts/workforce-development-should-focus-more-on-fixing-work/>

hometowns; therefore, it is recommended that tech companies work towards supporting at-risk communities through comprehensive workforce development programs, with an aim to increase access to opportunity for all.

Micron

Micron Technology Inc. is primarily a semiconductor manufacturing company based in Boise, Idaho that recently gained nationwide recognition due to its historic commitment of over \$100 billion to expanding operations in the State of New York – the single largest private investment witnessed in the State.

On October 4, 2022, Governor Kathy Hochul announced Micron’s plans to invest in New York; plans that would transform New York into a “global, leading-edge semiconductor manufacturing hub”. This investment by Micron is expected to be realized over the next 20-plus years and is expected to create over 50,000 jobs – 9,000 Micron jobs, and over 40,000 community jobs.⁵⁵

Micron’s decision to invest in New York came off the back of New York State’s nation-leading Green CHIPS Act, pursuant to which, Micron will draw its electricity from 100-percent renewable sources and make far reaching sustainability commitments. Also, Micron will implement a \$500 million community investment framework to ensure that the project benefits the people and communities of New York.

As part of the Green CHIPS Act, the State of New York has pledged up to \$10 billion in economic incentives for environmentally friendly “Green CHIPS” semiconductor manufacturing and supply chain projects – alongside a host of shovel-ready sites, cutting-edge R&D infrastructure, and a talented workforce. This is the nation’s first State-level companion to the federal CHIPS incentives.⁵⁶ The federal CHIPS and Science Act, with its first-of-its-kind \$52 billion in federal incentives to spur American semiconductor research, also requires recipients to make significant sustainability and community investments. Under the Green Chips program (New York) and the CHIPS Act (federal), the Micron project is estimated to result in a 20:1 benefit-cost ratio – Micron will directly spend \$20 on capital investment, research and development, and salaries and wages for every \$1 of support provided by New York State.⁵⁷

On October 27, 2022, Micron released a statement detailing its planned community investments in the State of New York.⁵⁸ Micron signed the Community Investment Framework alongside Governor Kathy Hochul to initiate a commitment of a \$500 million Green CHIPS Community Investment Fund. \$250 million will be invested by Micron, while the remaining \$250 million is expected to be invested from New York and local and state partners. This Fund focuses on workforce development, education, community assets and organizations, and affordable housing. The commitments from this fund include the following:

- Micron will invest \$5 million over 10 years towards building and outfitting a cleanroom at Onondaga Community College and support development of the school’s technical curriculum
- Micron will partner with Syracuse University’s D’Aniello Institute for Veteran and Military Families and support veteran skill development for advanced manufacturing jobs and transitions into Micron and other industry roles. Micron aims to hire more than 1,500 veterans over two decades
- Micron will establish an internship program designed to prepare students for full-time positions as engineers, scientists, and other critical roles in the semiconductor industry. Recruitment will focus on veterans and students from traditionally underrepresented communities
- Micron committed to partnering with Syracuse University to support new, diverse faculty whose research and teaching will train the workforce of the future through its Future Professors Fellowship Program. The program will focus on the quantum and chips cluster at Syracuse University
- Micron will launch a \$500,000 sponsorship at the Museum of Science and Technology (MOST), which includes a long-term exhibit that educates students about semiconductors and their common applications, along with a STEM education series to provide continuous learning opportunities
- In addition, Micron plans to invest \$10 million in venture funding in partnership with the regional tech ecosystem to support and attract new businesses coming to Central New York
- Micron has committed to working with the state of New York to identify policies that support better infrastructure, housing opportunities, and

⁵⁵ <https://www.governor.ny.gov/news/hochul-schumer-mcmahon-announce-micron-coming-onondaga-county-micron-will-invest-unprecedented>

⁵⁶ <https://esd.ny.gov/green-chips>

⁵⁷ <https://www.governor.ny.gov/news/hochul-schumer-mcmahon-announce-micron-coming-onondaga-county-micron-will-invest-unprecedented>

⁵⁸ <https://www.micron.com/ny/ny-community-event-fact-sheet>

social and financial inclusion by commissioning a study to understand the specific and unique hurdles in the Syracuse region

Overall, Micron's plans to invest in New York are fairly recent, and it is hard to analyze the depth and breadth of its community investments since they have not been put into practice yet. However, thus far, Micron's commitments to New York's community are substantial.

Best Practices

In addition to the specific commitments highlighted in these case studies, the project team has identified several best practices related to deal structure, partnership structure, implementation, catalyzing economic growth and access to opportunity, and other key takeaways from the community commitments reviewed. This section also describes potential pitfalls to be avoided in structuring agreements with large firms planning to locate a large-scale facility in a community.

Overall Takeaways

Apple's contributions to Cupertino, California, are significant by any standard – the most notable contribution being \$2.5 billion towards affordable housing over several years. As mentioned earlier, Apple's contributions to the community have prevented thousands of families from losing their homes and have helped thousands of others become homeowners in the Bay Area, which is infamous for perhaps the starkest housing crisis across the nation. At the same time, Apple is currently ranked 4th on the Fortune 500, and still receives tax cuts from the City (35% of the city's sales tax revenue on its sales of devices to businesses within California).

While Apple's "Spaceship" campus can house up to 12,000 employees, it lacks public transit connections, forcing many employees to live further from the campus in order to access public transit. A general rule of thumb when considering investments into affordable housing should be to ensure good public transit connectivity – after all, people eligible for affordable housing are more likely to rely on public transit due its reduced cost relative to owning a private vehicle.

Microsoft, with a much smaller dollar-value commitment than Apple, addressed a key issue of affordable housing development that Apple did not.

Microsoft's partnerships with mayors of neighboring towns allowed more long-term benefits, and with the mayors pushing for relaxing zoning, it allowed developers to concentrate units near public transit stops. Microsoft's contributions to its community are relatively small for a company in the top 20 of the Fortune 500, especially when considering the dollar value of the taxes Microsoft has managed to avoid. While acknowledging that Microsoft has made significant contributions to its community, the community would not be overreaching to demand more of the tech giant.

Google's decision to craft a master plan for the City of Mountain View was a unique approach to ensuring affordable housing was developed on Google-owned property. Rather than simply selling their land to a developer with hopes that the developer would build affordable units, Google worked proactively with the community to craft a master plan like a city. Additionally, Google has continued to update its webpages and community partners with data and information regarding their progress.

In Boston, Massachusetts, General Electric committed \$50 million to Boston-based initiatives after announcing Boston as the new locale for the company's headquarters. A key takeaway from this case study is that the costs/benefits of incentives be measured and tracked after award, to ensure that the "return on investment" of public dollars to communities are making the initial incentive packages a truly worthwhile investment. Shortly after receiving incentives from the State and the City, General Electric downsized and were made to reimburse the commonwealth in proportion of the company's failure to maintain commitments for created and retained jobs.

Micron has made the single largest private investment commitment in the State of New York, and with \$500 million pledged towards community investments, also competes for a high rank when it comes to community contributions. Micron's investment plans build off of New York's Green CHIPS Act and focus heavily on workforce development and uplifting historically underrepresented communities. While the structure of this fund is somewhat standard, the dollar value of the commitment is high relative to what other tech companies have done for their communities.

Efficient Incentivization

In 2017, researchers with the Upjohn Institute for Employment Research found that most incentives offered to companies are provided for 10 or more

years into the future, which has been shown to have minimal impact on corporate relocation decisions.⁵⁹ Nearly 35% of incentives offered in the State of Ohio were structured as long-term agreements in the year 2015.⁶⁰ Researchers have found that providing large incentives that extend five to 10 years or more may undermine the future tax base of a state without affecting location decisions as much as more up-front incentives.⁶¹ To reduce this impact, and ensure that companies stay within a region, it is recommended that states and localities include “claw-back” provisions requiring payback if a firm leaves within a specified time period.⁶² Massachusetts implemented these provisions to ensure that GE paid back the incentives they received after the company downsized its employee footprint in Boston considerably.

Connecticut created a program titled the “First Five Plus” which provided various forms of assistance for large-scale business projects as a means of encouraging business expansion and job creation in Connecticut. The State’s economic development agency has flexibility in the structuring of financial assistance agreements, using tools such as forgivable loans, tax credits, and other assistance. In return, companies must promise to either create 200 new jobs within two years or invest \$25 million and create 200 jobs within five years.⁶³ The First Five Plus program reported annually on the financial impacts of the program until its termination in 2019.

At that time, the governor chose to instead focus investments on infrastructure and workforce development rather than renewing the First Five Plus program.⁶⁴ However, the program was touted as a success, with 19 companies participating creating over 4,000 jobs and retaining more than 30,000 jobs.⁶⁵ According to the state economic development agency, an added benefit of the program was the corporate philanthropy investments made in communities. Charter Communications was one of the 19 companies who received funding through the First Five Plus program and subsequently donated \$50,000 towards community centers within Stamford, Connecticut.

The State of Connecticut provides corporate tax credits of up to 100% for an investment, up to a

maximum of \$100 million, if locating in an urban area or on an industrial site. Corporate investments in urban areas must add substantial new economic activity, increase employment, and generate significant tax revenues to the municipality and the state in order to qualify.⁶⁶ Companies can become eligible for additional funding, should they choose to locate to a distressed community or should the company rehabilitate a historic facility for mixed use. Generating additional economic output within distressed communities is necessary to revitalize the neighborhoods and communities across the United States. Most companies will not actively seek to locate to distressed communities, but incentives have shown to be a valuable tool in attracting businesses to these areas.

Deal Structure

Deal structures varied widely across companies and communities. Takeaways from the most successful include:

- Lead organizations responsible for negotiating on behalf of the community should be identified as soon as possible; ideally, that coalition would include the same organizations responsible for issuing economic incentives, as well as political leaders, regional planning and community development entities, and other key community stakeholders
- In that same vein, identifying recipient organizations (typically non-profits) that can channel funds most efficiently and effectively to address critical areas of community concern should be a priority for communities; expecting tech companies to take the lead on identifying these organizations is a missed opportunity for those already embedded in the community to ensure that funds are targeted for maximum community benefit. These organizations should be involved in negotiations/discussions with the companies as early as possible
- It is critical that communities establish clear key performance indicators (KPIs) and benchmarks up front during negotiations, especially when it comes to when funds are released, who is responsible for spending them appropriately, and established protocols for tracking and documenting outcomes; and that any agreements established are legally binding and have “claw-back” provisions associated with

⁵⁹ <https://www.upjohn.org/bied/mapall.php>

⁶⁰ <https://www.upjohn.org/bied/map11table.php>

⁶¹ <https://www.upjohn.org/bied/mapall.php>

⁶² Ibid.

⁶³ https://portal.ct.gov/-/media/DECD/Research-Publications/Misc_Reports/First-Five-Plus-Summary-Report-2019.pdf?la=en

⁶⁴ <https://www.middletonpress.com/business/article/Connecticut-shifts-away-from-big-corporate-14075845.php>

⁶⁵ https://portal.ct.gov/-/media/DECD/Research-Publications/Misc_Reports/First-Five-Plus-Summary-Report-2019.pdf?la=en

⁶⁶ https://portal.ct.gov/DECD/Content/Business-Development/06_Tax_Incentives/Tax-Credits/Urban-Industrial-Sites-Reinvestment-Tax-Credit/Urban-Industrial-Sites-Reinvestment-Tax-Credit

any incentives provided to the company, to help ensure companies fulfill the agreed-upon commitments

- Infrastructure investments to support new company facilities should also provide a greater benefit to the surrounding community; simply adding lanes to roads and repaving for increased vehicular usage would be a lost opportunity to provide public benefits. Transit shelters, nature trails, sidewalks, and bike lanes should be considered and implemented to increase accessibility and ensure long-term viability of the site for future uses
- Communities should confirm that the jobs created will benefit disadvantaged populations, and pay at least a living wage. For example, the State of Minnesota explicitly define their incentive packages to ensure that incentives are provided to those companies that submit proof of higher-paying jobs that benefit minority populations⁶⁷
- Encouraging large tech companies to leverage their connections to state economic development departments to bolster their commitment to affordable housing helps to maximize broader community benefit
- Tech companies have the capital and knowledge to initiate planning projects, and should be encouraged to partner with public, non-profit, and private entities to involve the community in their planning efforts and vice-versa, to maximize firm-community co-benefits
- Housing affordability is affected by a variety of factors; however, when major tech companies increase their employment within a region, affordability and availability of housing is nearly always directly impacted; communities should encourage companies to consider incorporating mixed-use developments on their campuses that allow workers to quickly commute to their workplace, while also providing opportunities for retailers to connect with a new customer base

Partnerships

Research for this effort found that companies that establish close, long-term partnerships with local governments typically create more public value through affordable housing and other important commitments, as opposed to one-and-done donations or “volunteer days.”

While philanthropic grants are always helpful to ensuring community-based non-profits organizations

are supported in their community-building missions – partnerships that extend beyond the initial grant injection have the greatest potential to sustain positive long-term community relationships. These relationships have the potential to materialize into greater opportunities not only for employees of major tech companies but also for lifelong residents of an area.

Microsoft & Google’s affordable housing development approach of partnering directly with local municipalities to up-zone land and plan communities offers a long-term solution to address the inevitable impacts of tech companies on housing. When addressing the complexity of affordable housing in major metropolitan areas, inventive strategies and partnerships with a wide range of stakeholders from private, non-profits, and public entities are necessary to achieve long-term success.

Researchers with the University of California-Berkeley have found that 80% of developments in California in since 2016 layered between four to eight sources of funding, with 9% relying upon more than eight funding sources.⁶⁸ This complexity results in inefficiencies for affordable housing developers, local officials, and other parties involved, considerably hindering the time required to build additional affordable units. Thus, it becomes necessary for private entities such as tech companies to become more active, long-term partners in affordable housing development to ensure that the thousands of staff employed in day-to-day operations have adequate housing.

While the Low-Income Housing Tax Credit (LIHTC) program has been a critical tool for building new affordable housing in the US in recent decades, producing over 3 million new homes since its introduction in the late 1980s, it requires developers to work through a complex system of financing, where multiple sources of funding are stacked to make a deal financially feasible.⁶⁹

Implementation

Effective implementation of community commitments requires the clear delegation of roles and responsibilities, ownership/leadership, and commitments from multiple partners to maintain momentum. Other takeaways include the following:

- Researchers have found that incentive packages have greater impact on attracting

⁶⁷ <https://mn.gov/deed/business/financing-business/deed-programs/mn-jcf/>

⁶⁸ Ibid.

⁶⁹ <https://ternercenter.berkeley.edu/wp-content/uploads/2021/04/LIHTC-Complexity-Final.pdf>

companies when they are shorter term (five years or less) with significant “claw-back” provisions to ensure companies fulfill their employment obligations

- Partnerships should long-term, and help to public transparency standards. Provisions should be put in place during negotiations that detail specific consequences for companies that do not fulfill their commitments within established parameters. Up-to-date tracking of those established KPIs, and post-implementation studies measuring impacts of both incentives provided to companies, and community commitments, should be regularly conducted (ideally with financial support from the company), and publicly available
- States such as Connecticut use programs like the “First Five Plus” Program to support companies in their growth and to retain jobs. This program is explicit in its mission to aid large-scale business projects as a means of encouraging business expansion and job creation in Connecticut. The State’s economic development agency accomplishes this through financial assistance agreements, loans, forgivable loans, tax credits, and other tools. In return, companies must promise to either create 200 jobs within two years or invest \$25 million and create 200 jobs within five years.⁷⁰
- Lump-sum grant injections should be discouraged, and companies should be persuaded to engage in long-term relationships with community-based organizations to build relationships and provide greater public value to the community. It is recommended that communities, in partnership with firms, commit to logging/tracking public incentives granted against measurable benchmarks/outcomes of firm impacts and commitments, including increases in cost of living, workforce development metrics, overall economic impacts, quality of life considerations, environmental impacts, changes in key equity metrics, etc.

Catalyzing Economic Opportunity

Community commitments were analyzed to understand which investments not only met a specific need within the community and/or mitigated potentially negative impacts caused by the company’s decision to locate there but were also targeted and well-considered enough to generate

additional economic benefit and long-term opportunities for the broader community. The key takeaways from this analysis include the following:

- Holistically addressing workforce needs is key to retaining and growing the skilled workforce needed to continue growing the business/industry in their respective communities
- Successful workforce development efforts are built upon the experiences of workers and their strengths rather than focusing entirely on what they are lacking
- Companies should be encouraged to direct their philanthropic endeavors locally, building upon their relationships with the communities they are embedded in
- Investments in other smaller businesses in the community, and in the broader “entrepreneurial ecosystem” through grants, loans, and other assistance, can help diversify regional economies and drive supplier growth
- Workforce development programs should adopt a “place-based” approach – training workers based on the employment needs locally and ensuring that systemic barriers are addressed.
- In addition to providing broader workforce development benefits, focus on recruiting and embedding a diverse cohort of trainees and apprentices within departments with equity gaps can help address broader equity concerns⁷¹
- When possible, commitments by firms should be leveraged for additional funding opportunities; for example, some commitments, if structured appropriately, could be eligible to serve as a local match for state and federal grants. The community should ask to be involved with any deals struck by firms with suppliers or other supporting companies/industries, to maximize community and workforce benefits stemming from the attraction of other firms to the area

Lessons for Central Ohio

In light of the recently announced investments by major tech companies in Central Ohio, including Intel, Microsoft, and Honda, several takeaways from our research have direct bearing on how Central Ohio communities might better negotiate mutually beneficial commitments and partnerships with major corporations, including:

- Historically, Intel has committed significant resources to renewable energy – e.g., 100% of

⁷⁰ https://portal.ct.gov/-/media/DECD/Research-Publications/Misc_Reports/First-Five-Plus-Summary-Report-2019.pdf?la=en

⁷¹ <https://www.aspeninstitute.org/blog-posts/workforce-development-should-focus-more-on-fixing-work/>

the energy used by Intel's Oregon and Arizona facilities is renewable energy, through a combination of on-campus generation and/or renewable purchases. It is expected that Intel's facilities in Central Ohio will have similar aspirations

- Semiconductor manufacturing is also an extremely water-intensive manufacturing process. In Arizona and Oregon, Intel has committed to supporting water restoration. It should be expected that Intel's facilities in Central Ohio would follow a similar pathway, committing to sustainability goals for the local community
- Intel's commitment of \$50 million towards funding regional higher education is significant; however, commitments made by other companies can provide additional context. Micron, for example, announced its expansion in New York in 2022, and pledged \$250 million⁷² to community development on a total of a \$100 billion investment. These figures represent similar ratios of total investment to community commitments of 400:1, for both Intel and Micron.⁷³ Considering that Micron also received additional funding from New York's Green CHIPS Act, it could be argued that Intel's proportional commitment, all things considered, is more valuable than Micron's
- Intel's commitment to partnering with local universities to develop a pipeline of semiconductor manufacturing and other STEM talent is a valuable investment in the Central Ohio region. The Columbus MSA currently produces close to 6,000 completions annually in degrees related to information technology and precision production.⁷⁴ Over a third (2,000+) of these completions come from Ohio State University, while close to 1,000 come from Columbus State Community College. Intel's commitments to partnering with these institutions and develop employment pipelines would assist in talent retention for the region
- The U.S. as a whole is facing a severe shortage of affordable and workforce housing. According to a study in 2017 by the Building Industry Association of Central Ohio, the Central Ohio region has an estimated annual need of approximately 14,000 housing units annually through 2050 to meet the demands of the growing area.⁷⁵ Over the last several years, the region has continued to fall short behind on housing production; with Intel's arrival on the

horizon, the region's housing deficit will continue to rise, if nothing is done to accelerate housing growth. As this report details, other large tech firms have made substantial commitments to supporting the development of affordable/workforce housing; however, Intel has yet to make a substantive commitment to address Central Ohio's housing shortage

- As aforementioned, carefully constructed, committed partnerships between public, private, and philanthropic entities were critical for both the effectiveness/success of the firm's investment in the community, as well as the overall co-benefits that both the firm's initial investment and community commitments generated
- The case study examples demonstrate that philanthropic efforts are also most effective if there are a wide variety of stakeholders involved; simply providing a lump sum to an organization is less effective than collaborative efforts between public officials, non-profits entities, and private interests to address a complex issue like housing or homelessness. This creates more public value through transparency, policy change, volunteerism, and financial support outside of a traditional "one-and-done" donation. Examples of organizations in Central Ohio that should be involved in broader discussions with firms like Intel and Honda include JobsOhio, MORPC, COTA, the Columbus Foundation, Columbus State, and many others
- Tech campuses can have major implications for existing transit networks; while MORPC is starting to work with New Albany/Licking County to address some of the impacts of its new facilities on transportation, one takeaway from our research on the impacts of major tech investments in other communities is that companies should be incentivized into providing transit for their workers through shuttles, and/or invest in area public transit networks
- Another major lesson learned from this survey of tech "community commitments" is that infrastructure investments by tech firms should not be focused only on the company's campus – they should serve as long-term investments that will support the company for the duration of its stay and any other use that may come later

⁷² While the total value of the Micron Fund is \$500 million, only \$250 million is being invested by Micron – the other \$250 million is expected to come from the state and other local partners.

⁷³ Intel: \$20 billion / \$50 million = 400.

Micron: \$100 billion / \$250 million = 400.

⁷⁴ Lightcast.IO

⁷⁵ <https://www.biahomebuilders.com/housing-study/>

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Appendix – Research and Data

Company	Place	State	Date of commitment	Investment Type	Dollar Value	Amount delivered to date	Matching commitment	Incentives Received	Partners involved	Community Benefit	Source
Apple	Southern California	CA	2020	Affordable housing	\$2,500,000,000	\$2,500,000,000	-	\$70,000,000	Apple, California Housing Finance Authority	Affordable housing development in southern California	https://appleinsider.com/articles/22/07/25/apples-25-billion-investment-in-affordable-housing-is-building-new-communities
Google	San Francisco / Oakland	CA	6/18/2019	Affordable housing	\$1,000,000,000	-	-	-	Google, Affordable housing real estate developers, Nonprofits addressing homelessness	Repurposing office land to housing and investing in affordable and middle income housing in the bay area	https://blog.google/inside-google/company-announcements/1-billion-investment-bay-area-housing
Microsoft	Seattle	WA	1/20/2022	Affordable housing	\$750,000,000	\$583,000,000	-	\$753,465,220	Microsoft, Local governments, Housing providers and investors	Comprehensive affordable housing investments that has helped preserved 9,200 affordable units in the Puget sound area	https://blogs.microsoft.com/on-the-issues/2022/01/20/affordable-housing-initiative-washington-state-2022
IBM	Cleveland	OH	2023	Healthcare	\$ 500,000,000.00	-	\$ 200,000,000.00	\$ 200,000,000.00	IBM, Cleveland Clinic, State of Ohio	Massive healthcare investment via quantum computer installed within Cleveland Clinic. It is projected to create 1,000 jobs and "build a pipeline of new tests, vaccines, and treatments."	https://siteselecton.com/issues/2023/may/quantum-leap.cfm?utm_source=Sidebar&utm_medium=Web&utm_campaign=Optimize&utm_content=RA
Cisco Systems	San Jose	CA	2011	Nonprofit grants	\$494,000,000	\$494,000,000	-	-	San Jose nonprofits	The Cisco Foundation has a wide scope - offering donations to organizations across the globe, but the community based grants focus on the greater bay area - 50 miles out. This grant accepts applications annually from smaller nonprofits that are benefiting the greater San Jose area.	https://www.cisco.com/c/en/us/about/csr/community-nonprofits/community-impact-grants.html#community-impact-grants

Company	Place	State	Date of commitment	Investment Type	Dollar Value	Amount delivered to date	Matching commitment	Incentives Received	Partners involved	Community Benefit	Source
Moderna	Marlborough	MA	2023	Capital Improvements	\$350,000,000	-	-	TIF district	Marlborough	200 permanent jobs; capital improvement investment	https://www.manufacturingdive.com/news/moderna-to-spend-322-million-on-biomanufacturing-plant/651560/
Micron	New York	NY	2022	Education, Workforce Development	\$250,000,000	-	\$250,000	-	Micron, State of New York, Syracuse University, and others	Micron announced plans to expand operations in New York in 2022, and signed a Community Fund worth \$500 million, of which \$250 million will be contributed by Micron, while \$250 million will come from the State and other local partners. The direction of the fund includes partnerships with local universities to aid in workforce development and create talent pipelines with a focus on historically underrepresented groups.	https://www.governor.ny.gov/news/hochul-schumer-mcmahon-announce-micron-coming-onondaga-county-micron-will-invest-unprecedented
Micron	Onandaga	NY	10/4/2022	Workforce development	\$250,000,000	-	\$250,000,000	\$6,000,000,000	State of New York, Micron	Investment in workforce development for minority and disadvantaged communities	https://investors.micron.com/news-releases/news-release-details/micron-announces-historic-investment-100-billion-build-megafab
Amazon	Arlington	VA	12/14/2021	Affordable housing	\$160,000,000	\$160,000,000	\$150,000,000	\$750,000,000	Arlington County	1,300 affordable housing units, preserved for 99 years	https://www.arlington.com/2023/01/19/amazon-touts-investments-for-upping-arlington-affordable-housing-stock-by-20/
Dell	Austin	TX	11/30/2021	Affordable housing	\$150,000,000	\$38,000,000	\$35,000,000	Enterprise Zones	Travis County, Dell, Local nonprofits	Building 1,400 homes specifically for houseless individuals	https://www.stateman.com/story/news/local/2021/11/30/dell-family-foundation-gives-38-million-3-austin-organizations/8769054002/

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United Health Group	Washington	DC	6/4/2020	Affordable housing	\$100,000,000	-	-	\$100,000	Stewards of Affordable Housing for the Future, National Housing Trust (NAHT)	Investment in affordable housing for DC and other areas	https://www.businesswire.com/news/home/20200604005427/en/UnitedHealth-Group-Invests-Additional-100-Million-in-Affordable-Housing-to-Further-its-Commitment-to-Building-Communities-That-Achieve-Better-Health-Outcomes
3M	Minneapolis	MN	1953	Education, Nonprofit grants	\$82,100,000	\$50,000,000	-	\$263,439	Minneapolis nonprofits and food banks	The 3M foundation has more of a local focus - opting to support local food equity efforts, sustainability, and other support areas.	https://equity.3m.com/our-communities/
Intel	Statewide	OH	2022	Education	\$50,000,000	\$17,700,000	-	\$600,000,000	Intel, University of Cincinnati, Central State University, Columbus State Community College, Kent State University, Lorain County Community College, Ohio University, and Ohio State University	In March of 2022, Intel announced \$50 million in grants directly to higher education facilities in Ohio, and an additional \$50 million to science programs nationwide . The National Science Foundation will match the \$50 million to support new research initiative nationwide . In September 2022, Intel disbursed the first batch of the promised \$50 million to Ohio's institutions - \$17.7 million to be distributed to the partners involved to develop semiconductor education and workforce development programs. The State of Ohio has agreed to provide Intel with \$600 million to assist with construction - \$300 million per facility.	https://www.intel.com/content/www/us/en/newsroom/news/intel-invests-100m-ohio-national-education.html#qs.3xmi95

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GE	Boston	MA	4/4/2016	Education, Healthcare	\$50,000,000	\$50,000,000	-	\$150,000,000	Boston Public Schools, GE, Boston Community Health Centers, DEI	STEM education for students, investment in health centers	https://www.ge.com/news/press-releases/ge-commits-50m-empower-bostons-students-build-capabilities-careers-and-improve
USAA	San Antonio	TX	10/12/2020	Nonprofit grants, DEI	\$50,000,000	\$50,000,000	-	\$5,000,000	USAA, Nonprofits	USAA committed \$50 million to nonprofit organizations over three years to improve racial equality and positively address employment, educational and economic disparities that exist within communities of color.	https://communities.usaa.com/t5/Press-Releases/USAA-Announces-3-Year-50-Million-Commitment-to-Advance-Racial-Balanced-Communities-238847
Intel	Hillsboro	OR	2020	Education	\$40,600,000	\$40,600,000	-	-	Intel Foundation	Over the past 5 years, the Intel Foundation has contributed \$40.6 million to support Oregon's schools and nonprofits.	https://www.intel.com/content/www/us/en/corporate-responsibility/intel-in-oregon.html
Charter Communications	Stamford	CT	9/15/2021	Capital Improvements	\$30,000,000	-	-	\$10,000,000	Charter Communications, State of NH, Stamford, area community centers	Charter received \$10 million in state credits to relocate their headquarters to Stamford in 2012 - in 2021 the company announced its \$30 million investment in community centers across 41 states. The first community center to receive funding is based in Stamford, receiving \$50,000 as well as internet infrastructure upgrades.	https://corporate.charter.com/new-room/2023-spectrum-community-center-assist-programs-at-new-locations
Salesforce	San Francisco/Oakland	CA	9/19/2022	Workforce development	\$25,000,000	\$165,000,000	-	-	Salesforce, San Francisco Public Schools, Oakland Public Schools	Salesforce has committed well over a hundred million to schools in the bay area and beyond for STEM programs and other student and teacher support.	https://www.salesforce.com/news/press-releases/2022/09/19/salesforce-education-donation-2022-dreamforce/

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Intel	Wasco County	OR	2023	Green Energy	\$15,000,000	-	-	-	Intel Foundation, Portland General Electric, AVANGRID	In April 2023, the partners involved announced the Bakeoven Solar Project, enabling PGE to purchase clean, emissions-free electricity with Intels' collaboration from a new 60-megawatt facility in Wasco County. The project is expected to create over 80 construction jobs and generate approximately \$15 million in tax revenue over its life span.	https://www.intel.com/content/www/us/en/newsroom/article/helping-power-oregon-solar-future.html
Intel	Statewide	AZ	2022	Education, Sustainability	\$7,100,000	\$7,100,000	-	-	Intel Foundation	Over the course of 2022, Intel made \$7.1 million in charitable contributions to Arizona-based organizations in 2022, focusing on schools and nonprofits.	https://www.intel.com/content/www/us/en/corporate-responsibility/intel-in-arizona.html
Elevance Health	Indianapolis	IN	5/31/2023	Healthcare	\$5,700,000	\$19,500,000	-	\$200,000	Elevance, Nonprofit organizations	Elevance Health is providing grants to nonprofits that assist individuals suffering from substance use disorder - these grants are to organizations across the country, but some are located in Indianapolis.	https://www.businesswire.com/news/home/20230531005289/en/Elevance-Health-Foundation-Grows-Substance-Use-Disorder-Partnership-Programs-Through-Second-Phase-of-Grants
Liberty Mutual	Boston	MA	1/22/2020	Nonprofit grants	\$5,000,000	\$5,000,000	-	\$22,500,000	Liberty Mutual, East Boston Nonprofits	Liberty Mutual began a campaign in 2020 to donate to Boston organizations that are working to reduce and end youth homelessness. Liberty Mutual chose 19 organizations to disperse \$5 million over several years.	https://easttimes.com/2020/01/22/liberty-mutual-insurance-announces-19-east-boston-community-grants/
Bosch	Charleston	SC	2023	Workforce development, Education	\$2,500,000	\$2,500,000	-	-	Charleston Public Schools, Bosch	STEM grants to Charleston schools	https://us.bosch-press.com/pressportal/us/en/press-release-19392.html

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Comcast	Oakland	CA	2/27/2023	Workforce development	\$2,000,000	-	-	-	Comcast, The Hidden Genius Project	Grant to a nonprofit that trains Black youth in the Oakland area to work in tech fields	https://www.businesswire.com/news/home/20230224005303/en/Comcast-Partners-With-The-Hidden-Genius-Project-to-Help-Black-Male-Youth-Acquire-Digital-Skills-and-Enter-the-Tech-Sector
Boeing	Chicago	IL	8/20/2020	Education	\$1,500,000	\$1,500,000	-	\$302,469	Boeing, Chicago Public Schools	Technology access for CPS students	https://www.chicago.gov/city/en/depts/mayor/press_room/press_releases/2020/august/BoeingCPSTechnologyGrant.html
Hyundai	Savannah	GA	10/25/2022	Education, Healthcare, Affordable housing	\$1,420,000	-	-	\$1,800,000,000	Georgia Tech, Genesis Foundation	STEM investments in area schools, establishment of cancer center, investments in affordable housing	https://www.hyundaius.com/en-us/releases/3676
Dell	Austin	TX	2/13/2020	Education	\$1,250,000	\$750,000	-	Enterprise Zones	Austin Community Colleges	Scholarship fund established within the Austin Community College system that gives out \$5,000 to each recipient. \$250,000 each year	https://www.austinncc.edu/news/2020/02/michael-susan-dell-foundation-help-fund-career-scholars-program
Lockheed Martin	Bethesda	MD	8/27/2019	Education	\$1,000,000	\$1,000,000	-	\$272,879	Lockheed Martin	Scholarships to students within STEM degree fields (21 students total)	https://www.csrwire.com/press_releases/42417-lockheed-martin-awards-nearly-1-million-to-dmv-scholars
AT&T	Dallas	TX	1/28/2022	Education	\$1,000,000	-	-	\$11,500,000	AT&T, United Way	AT&T donated thousands of refurbished laptops to K-12 students in the Dallas community through the Dallas United Way affiliate	https://dallasinnovates.com/forces-for-good-att-commits-1m-to-southern-dallas-thrives-last-mile-announces-north-texas-education-fund-and-300k-is-awarded-to-five-dallas-nonprofits/

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Prudential	Newark	NJ	3/1/2023	Nonprofit grants	\$500,000	-	-	\$223,277,590	Prudential, Lincoln Park Coast Cultural District, Ironbound Community Corporation, La Casa de Don Pedro, Southward Promise Neighborhood, and Unified Vailsburg Services Organization	Community grants program that supports local, community-based projects that foster stability and growth, with \$500,000 in total funding. Prudential aims to support neighborhood-based solutions and highlight community vitality	https://news.prudential.com/prudential-financial-launches-prudential-community-grants-program-to-provide-micro-grants-to-local-individuals-and-non-profit-organizations.htm
Root	Columbus	OH	2015	Education, Healthcare	\$300,000	\$300,000	-	\$15,600,000	Root, Ronald McDonald House, Mid-Ohio Market Food Pantry, Olentangy River cleanup	Engaged volunteerism	https://inc.joinroot.com/corporate-social-responsibility/
Autodesk	Huntington	WV	2022	Workforce development, green infrastructure	\$250,000	\$250,000	-	-	Coalfield Development	Investment in workforce development for coal workers and families impacted by the conversion to green energy. Coalfield Development retrains workers for in-demand jobs, adapts formerly abandoned properties, and helps small businesses get started.	https://blogs.autodesk.com/autodesk-foundation/2022/04/14/our-investment-in-coalfield-development/
General Motors	Flint	MI	1/13/2022	Nonprofit grants	\$145,000	\$145,000	-	\$1,761,000,000	Various nonprofits	Boys & Girls Clubs, parks, etc	https://www.mlive.com/news/flint/2022/01/gm-grants-mean-145k-for-seven-flint-area-nonprofits.html
Duke Energy	Plainsfield	IN	2017	Capital Improvements	\$125,000	\$700,000	-	\$204,000,000	Duke Energy, Local EDAs	Investments in local EDAs and localities for strategic capital planning efforts	https://www.streetsinsider.com/Accesswire/Duke+Energy+Awards+More+Than+%24125%2C000+in+Grants+To+Support+Economic+Development+in+Indiana/21759311.html?ref=econdevshow.com

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CIGNA	Hartford	CT	7/12/2011	Healthcare	\$100,000	\$100,000	\$50,000,000	\$50,000,000	CIGNA, State of Connecticut	Three years after receiving incentives to move to the state in 2011, Cigna devoted \$100,000 to supporting healthcare access in underserved neighborhoods.	https://www.fiercehealthcare.com/payer/cigna-first-to-benefit-from-connecticut-s-new-first-five-economic-development-program
Cross River Bank (FinTech)	Fort Lee	NJ	5/4/2023	Education	\$50,000	\$50,000	-	-	Cross River Bank, New Jersey Institute of Technology	Scholarships to students within degree programs that are fintech related	https://www.businesswire.com/news/home/20230504005861/en/Cross-River-Bank-and-New-Jersey-Institute-of-Technology-Join-Forces-to-Create-Cross-River-Opportunity-Scholarship
AGCO (AG Tech)	Orchard Park	NY	3/22/2023	Green infrastructure	\$50,000	\$50,000	-	-	AGCO, Providence Farm Collective	Grant to small farm collective to generate an on-farm composting system and additional food safety measures. The farm collective supports refugees, immigrants, Black and low-income farmers in Western NY.	https://www.businesswire.com/news/home/20230322005050/en/AGCO-Agriculture-Foundation-Awards-50000-Grant-to-Providence-Farm-Collective
Adobe	San Jose	CA	2007	Education, Nonprofit grants	\$50,000	\$50,000	-	-	City of San Jose	The Adobe Foundation operates a philanthropic fund that San Jose nonprofits (and beyond) can apply to for funding to support their individual missions. Adobe partners with the City of San Jose to support various initiatives to reduce homelessness, address transit inequity, and support STEM programs.	https://www.adobe.com/corporate-responsibility/community/product-donations.html
Oracle	Austin	TX	6/22/2022	Food Equity	\$35,000	\$35,000	-	\$1,000,000	Oracle, Central Texas Food bank	Investment in food bank for latest HQ move for Oracle	https://www.centraltexasfoodbank.org/news/oracle-grant-helps-food-bank-fight-hunger-central-texas

* The '-' symbol signifies that the relevant datapoint was not available or found to be \$0 during research.

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