

August 31, 2021



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The Honorable Wade Kapszukiewicz
Members of the City Council of Toledo
One Government Center
640 Jackson Street
Toledo, OH 43604
Delivered Electronically

Re: Toledo Recovery Plan Investments

Dear Mayor Kapszukiewicz and Members of the City Council,

On behalf of Bitwise Industries, I write to encourage you to invest American Rescue Plan Act funds in information technology ecosystems and services that simultaneously meet Toledo's need for accessible workforce training programming in a growth industry, universal digital literacy, and redevelopment of its physical spaces, all of which will set the stage for long-term, equitable economic vitality.

The city of Toledo is brimming with potential that the American Rescue Plan Act money can unlock. The city offers opportunities that have attracted Bitwise Industries and that can inspire more entrepreneurial energy across sectors. To capitalize on Toledo's greatest assets (which include a young population, solid high school graduation rates, and past success in partnering across sectors to redress targeted issues like jail crowding and over-incarceration at the pre-trial phase) leaders should accelerate investment in acquisition of both basic and advanced digital skills, and in preserving and restoring infrastructure so that the physical environment brings together and inspires Toledo's next generation of innovators.

Bitwise Industries Is Building a Tech Ecosystem in Toledo

Since 2013, Bitwise Industries, a female and minority-led technology company headquartered in Fresno, CA, has been training unexpected people from undervalued

places for jobs in the digital economy. Our workforce training programs have prepared over 5,000 student workers, with 80% employed in tech jobs resulting in \$295 million of aggregate wages, mostly for women and minorities. Many of these individuals have gone from making under \$21K/year to well over \$61K/year. Furthermore, the technology consulting side of our business hires the majority of these students, proving it is possible to build stellar technology in unexpected places with diverse, nontraditional talent.

Our model begins by recruiting individuals who are determined and curious into workforce development/pre-apprenticeship classes in coding, technical support, and related areas, which are coupled with access or referral to life-essential services that address non-technical barriers to entry caused by poverty and bias. Leveraging public-private partnerships, Bitwise then provides paid apprenticeships with our software design and tech consulting business to many of these people, to further develop their skills on the job. In some cities, apprentices are able to put their skills towards building critical digital infrastructure to improve government services. We also develop vibrant buildings in underestimated cities to house technology companies and the skilled tech workforce we have helped to cultivate, and we invest in promising start-up companies that are incubated in the spaces we have created. In 2021, we announced our expansion to Toledo and plans to partner with ProMedica to redevelop Toledo's Jefferson Building; we will begin offering virtual classes to Toledoans in September 2021.

Bitwise Industries' experience has conclusively demonstrated that the existence of deteriorating digital and physical infrastructure in underestimated communities presents an opportunity for profound economic growth and inclusion. We have learned that upskilling disenfranchised humans and revitalizing historic architecture empowers people to change their own lives—and ignites and transforms the regional economies of the cities in which Bitwise serves. In the process, communities gain the benefits of greater equity and sustainable economic activity.

Sustainability and Equity Are Necessary to Achieve Toledo's Priorities: Improved Quality of Life, Job Creation, and Historic Preservation

The extraordinary one-time funding appropriated in the American Rescue Plan Act will enable Toledo to expand a wealth of programs, services, and resources to overcome the challenges posed by the shifting economic, environmental, and social trends, but because this funding will end, it must be used to kickstart efforts designed for self-sufficiency. Projects that require continuing funding to succeed, particularly from the region's

oversubscribed public sector, should be avoided. An investment in infrastructure development, for example, should generate revenue that will be reinvested in maintaining property and that will generate taxable activity, while also improving the city's appearance and residents' quality of life. Bitwise Industries got off the ground because we had an exciting idea – that underestimated people could become leaders in the tech industry – but we have flourished and expanded because we have developed a successful, well-rounded business that strengthens digital infrastructure in cities while creating and maintaining jobs and accelerating related economic activity. This makes us an ideal partner to Toledo as it seeks to invest federal resources equitably.

Toledo's conscious pursuit of equity in procurement, programming, and relationships between officials and residents is key to securing enduring and self-sustaining results from the city's investment of the American Rescue Plan Act funding. Eliminating racial, ethnic, and other inequities in access to opportunity would strengthen Toledo for the long term by giving those who currently lack them the means to secure their basic needs and take active roles in the civic, economic, and social life of the city. The National Equity Atlas estimates that the Toledo region's gross domestic product would have been \$2.7 billion more in 2017 than it actually was if there had not been any disparities in income or employment between residents of different races and ethnicities.

Toledo Should Invest in All Three Components of a Tech Ecosystem

The success that Bitwise Industries has achieved at recruiting underestimated people into the tech industry and at growing productive tech clusters in underestimated cities can and should inform Toledo's expenditure of the American Rescue Plan funding on city priorities such as job creation and economic development. Our proven model transforms environments by setting out to build community and a sense of belonging around people who would not otherwise be likely to imagine themselves pursuing advanced formal education or working as IT professionals. We do this by working with people who are considering signing up for a class with us to understand and eliminate the barriers and concerns that stand in their way. We strive to meet the full range of an individual's needs, from broadband access and tutoring in English to transportation and child care.

We recommend a similarly holistic approach to recovery from pandemic-induced economic paralysis, and from longer-term changes to employment trends. Toledo should make a series of stacking investments in becoming the city it can be by expanding:

- provision of the skills training and supports marginalized residents need to thrive in well-paying jobs;
- the opportunity to break into growth career paths through apprenticeships and other publicly-funded employment reserved to the maximum extent allowed for people who have faced heightened barriers to employment and who lack typical educational and experiential qualifications;
- the opportunity to strengthen digital infrastructure to promote digital equity, adoption and accessibility across the community; and
- an appealing landscape that attracts and inspires escalating economic growth and job creation.

To thrive in the long term, Toledoans must be prepared to compete in the economy of the future that is likely to change significantly with increasing digitization. Compared to national averages, Toledo households have low rates of access to computers and broadband internet and are particularly likely to rely on mobile devices for connectivity. This characteristic is a hindrance to economic development and an indicator of the need for education in the kind of basic digital literacy that is a fundamental requirement for most good jobs, and important for navigating life in general.

Bitwise Industries can help expand access to the digital economy while upskilling Toledo's workforce. Our success as a workforce development engine, as well as a software and web development firm, proves that people do not need computer science degrees, which are usually expensive and time-consuming to obtain, to become effective and successful coders, designers, quality assurance managers, and to take on meaningful careers in tech. Instead, our students and apprentices have produced great results and exponentially increased their earnings in the space of just a few years, using abilities they have learned in their spare time and refined while on the job as paid apprentices.

There are many paths to attaining community-wide digital literacy, and whether Toledoans are best served by expansion of classroom-style instruction or by custom tech support services that complement broadband buildout and affordability campaigns, it is imperative that the city partner with entities like Bitwise Industries, whose personnel come from historically underserved households and communities, to support their peers in gaining familiarity with the internet and computers' capabilities. In doing so, Toledo can

double-task, increasing access to the digital economy while also ensuring opportunities for residents to obtain and exercise specialized competency in high paying jobs.¹

In addition, programs and services that are designed by and for the same communities are best-positioned for success, in our experience. We assigned a team of apprentices and journeyworkers with diverse backgrounds, based in the underdog cities we call home, to create the OnwardCA.org platform as the pandemic set in and job losses and economic crisis reverberated through the nation, for example. Many of our people had had the experience of needing and not knowing where or how to find help meeting basic needs and exploring employment options, and this knowledge informed their development of a surprisingly simple interface: in less than five minutes and by following straightforward instructions to enter just a few pieces of information, users could get customized guidance. OnwardCA.org's creators hoped that it would help 10,000 Californians displaced from employment because of COVID-19 in its first month, but in fact, within its first week online, the site matched nearly 250,000 individuals with emergency services or employment opportunities.

Toledo will secure the greatest and most sustainable return on its investment of American Rescue Plan funding by financing the development of infrastructure in addition to human resources. While putting thousands of underserved people on the path to good jobs, Bitwise Industries also learned that place matters. This is why Bitwise renews the physical environments in the cities it serves. The economic and cultural benefits of building preservation and redevelopment have been documented, and include expanded availability of affordable commercial and residential space, increases in the value of and taxes raised from nearby properties, job growth, decreasing crime, and greater enjoyment of and satisfaction with a city's aesthetic and environmental value. A 2019 study of the benefits of revitalization of Columbus, OH's downtown area found, for example, that areas within 300 feet of selected rehabilitation projects saw greater job growth than elsewhere, and that the increasing foot traffic of residents, workers, customers, and others attributable to activities arising from building renovations resulted in a 34 percent decline over the course of 4 years in the number of calls to police from immediate environs of these

¹ Bitwise Industries' push to train underestimated people for and to hire them into positions in which they design and implement tech solutions for community institutions has coincided with significant improvement in measures of equity in Fresno, where the majority of our students and apprentices to date have resided. According to the Urban Institute's 2018 report, [*Inclusive Recovery in US Cities*](#), between 2013, the year of Bitwise Industries' founding, and 2016, the racial home ownership and poverty gaps in Fresno each declined by 4 percentage points, and racial segregation also declined at a rate that outpaced the nation's.

projects, compared to just a 5 percent decrease in police calls from other parts of downtown.

Rehabilitating downtowns doesn't just inspire follow-on investments or enhance a municipality's property tax revenues: it makes space for people to meet, collaborate, grow, and envision new possibilities. The biggest and boldest step that our people take along their journeys is often the decision to attend an informational meeting or another community event happening in one of our buildings. Many of our students and apprentices haven't seen their peers occupying skilled tech jobs in great numbers and don't imagine the industry as a potential home for themselves. The experience they have when they step through our doors and meet our team members plays a pivotal role in convincing them to try something new, to believe in their own potential, and to form relationships that eventually inspire innovation and entrepreneurship. This is why Bitwise Industries is partnering with ProMedica to revitalize Toledo's historic Jefferson Building, and to equip it with facilities, including outdoor meeting and activity space and internet access, that draw in members of the surrounding community. With an investment in this important space, we will generate beneficial economic, social, and cultural activity throughout an underserved neighborhood for many years to come.

To advance equity and put itself on a sustainable upward trajectory, Toledo should allocate American Rescue Plan funding to support the redevelopment of deteriorating places. The city's leadership on this front would encourage the additional private investment needed to ensure that Toledo's physical environment reflects, and suits, its people's potential and ambition. In keeping with priorities set by federal authorities for the expenditure of relief money, we urge a focus on those places most affected by pandemic-inspired closures, as well as on neighborhoods that are home to people who've suffered the effects of endemic poverty and who disproportionately lost employment, housing, and other necessities since the onset of COVID-19. Priority zones should include the city's downtown area, hurt by the shift to working from home, and inner city areas like Roosevelt, Warren Sherman, and La Grange, in which jobs have been lost and median incomes have declined over the past 25 years, and residents have become vulnerable to unpredictable economic disruptions since March 2020.

Toledo Is Ready to Grow

While COVID-19 has challenged cities, and particularly members of marginalized communities, in unprecedented ways, the pandemic has also brought municipal leaders

an opportunity to reimagine their jurisdictions and to fund life-changing leaps forward. Like you, Bitwise Industries believes in Toledo's people and places, and is confident that, with the boost the city can now provide, they are poised to take on more prominent roles in our national economy and cultural fabric. We hope to partner with you to make Toledo's tech industry and historic infrastructure all that they can be, leveraging the extraordinary resources at the community's disposal.

Sincerely,

A handwritten signature in black ink, appearing to read 'Tammi Sherman', with a stylized, flowing script.

Tammi Sherman
VP, Bitwise Industries - Toledo