



Silicon Valley Manufacturing Initiative

Following its inception in December 2012, the Silicon Valley Manufacturing Roundtable (SVMR) has played a vital role for the manufacturing industry to engage with representatives from Federal, State and Local Government, industry associations, stakeholder groups and local academia, to highlight and begin to address issues and challenges facing the local manufacturing sector.

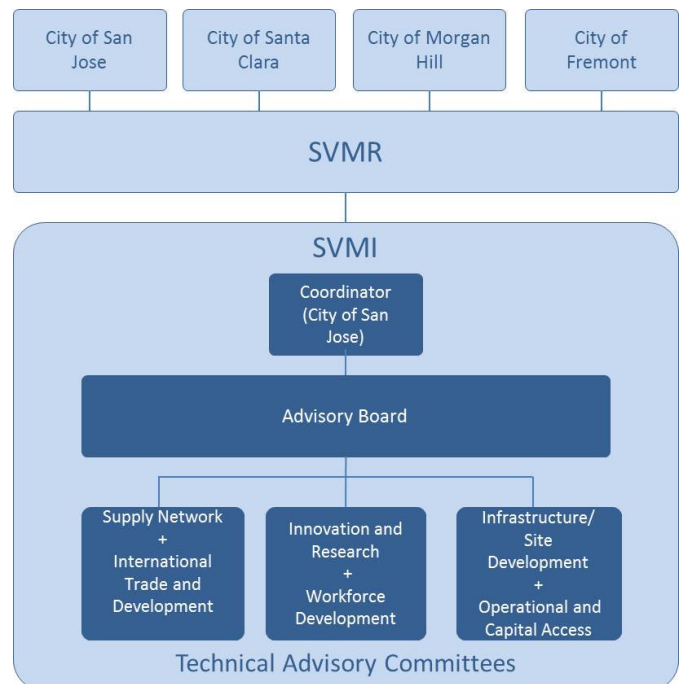
Due in part to the announcement of the Investing in Manufacturing Communities Partnership Competition led by the U.S. Department of Commerce, SVMR is leveraging 18 months of engagement and a wide range of strategic partnerships to launch the Silicon Valley Manufacturing Initiative (SVMI).

SVMI will be the vehicle to leverage public and private sector investment and opportunities to further strengthen and grow the region's advanced manufacturing industry. This application describes the existing industrial ecosystem and lays out the SVMI strategy and organizational structure that will further develop electronics manufacturing to create broad economic benefits throughout the region.

ORGANIZATION

SVMI is designed to encourage greater interaction between partners, develop systems and best practices to reinforce these connections, and encourage identification of new alignments. This structure will maximize the leverage of individual partner contributions and expertise, resulting in more efficient and effective programs.

In establishing the SVMI, we'll establish an Advisory Board to provide a forum for assessing activities, and a tool to provide feedback and input to the SVMI leadership on proposed activities. The Advisory Board will be supported by three Technical Advisory Committees covering the six strategic work areas of the strategy: Supply Network/International Trade and Development, Innovation and Research/Workforce Development, and Infrastructure and Site Development/Operational and Capital Access. These Groups will provide area-specific technical and policy input to the Board. We hope to leverage the expertise contained through participants in the Silicon Valley Manufacturing Roundtable.



Strategy Outline

1. Workforce training strategy

Goal:

Leverage new and existing programs and partnerships to prepare residents for careers in manufacturing, working with education, training, and labor partners.

Actions:

- 1.1. Work with local universities and community colleges to align and expand foundational training opportunities in engineering, machining, and product design.
- 1.2. Better connect industry to educational partners to plan for near- and mid- term workforce needs.
- 1.3. Appoint manufacturers to community colleges' advisory boards to address skill gaps and industry needs.
- 1.4. Partner with organizations to provide opportunities for industry representatives to participate in professional development seminars at universities and community colleges.
- 1.5. Promote the SVMR manufacturing careers internship project as a way to expose students to careers in manufacturing and provide valuable business experience, while introducing manufacturers to new talent pipeline opportunities.
- 1.6. Engage trade groups in developing apprenticeship training programs targeted at advanced electronics.

Goal:

Ensure that manufacturers have access to highly trained and skilled workers within the region.

Actions:

- 1.7. Demonstrate value of workforce investment board (WIB) training programs to manufacturing community, by highlighting processes and benefits.
- 1.8. Provide in-depth information on talent and workforce availability to guide local investments in workforce and facilities.
- 1.9. Leverage programs like the state of California employment training panel (ETP) and Manex Consulting to develop specialized training programs to meet changing workforce needs.
- 1.10. Coordinate with industry partners to develop a platform allowing companies to source and share talent resources as part of an open talent network, thereby addressing skills shortages and providing opportunities to reduce personnel costs.

Goal:

Create broad awareness of the opportunity that manufacturing careers represent and improve the general perception of manufacturing jobs.

Actions:

- 1.11. Increase visibility of manufacturing careers in the region through targeted marketing and events including ongoing participation in National Manufacturing Day.
- 1.12. Research and publicize clear career pathways from various levels of education to employment.
- 1.13. Encourage companies to highlight flexible workplace options to appeal to a broader talent pool.
- 1.14. Create improved opportunities for internships and create case studies based on individual experiences accessing opportunities in manufacturing.
- 1.15. Demonstrate the value of a career in manufacturing by publicizing comparative analysis with other career paths locally.

2. Supplier Networks

Goal:

Collaborate with regional partners to identify and prioritize activities that support local supply chain and logistics development, and improve regional competitiveness.

Actions:

- 2.1. Continue to convene the Silicon Valley Manufacturing Roundtable (SVMR) on a quarterly basis to provide opportunities for businesses, stakeholder groups, government and academia to collaborate on issues related to manufacturing.
- 2.2. Engage local supply chain management, industry and professional development organizations to facilitate collaboration within the manufacturing ecosystem.
- 2.3. Identify market opportunities using data driven knowledge to enhance opportunities for business retention, attraction and growth.

Goal:

Identify challenges and barriers to supply chain development, and develop innovative solutions and tools to support the growth of existing businesses and to attract new opportunities.

Actions:

- 2.4. Conduct a comprehensive review and summary of existing supply chain assets in the region to address the potential for additional companies in the region to begin supplying local industry.
- 2.5. Develop new tools that connect local supply chain opportunities and partners to local manufacturers in order to reduce lead times, improve quality, and improve flexibility and capacity.
- 2.6. Facilitate new networking opportunities across the supply chain to provide connections to component manufacturers, suppliers, manufacturing service providers, cargo owners and logistics providers.
- 2.7. Provide ongoing supply chain development workshops leveraging partner organizations and local industry expertise that focus on reducing costs and increasing competitiveness.
- 2.8. Partner with Manex Consulting to provide access to NIST MEP activities geared towards supply chain development for local companies.

Goal:

Develop strategic marketing programs and campaigns that promote the region's manufacturing and supply chain capabilities, highlighting local assets and competitive advantages.

Actions:

- 2.9. Create a common message around the electronics manufacturing industry in the region, including logistics and supply chain.
- 2.10. Develop a targeted marketing strategy directed at engaging high value customers including local research and development operations and global corporations with strategic locations in the region in order to expand opportunities for local service providers.
- 2.11. Roll out a "Made in Silicon Valley" campaign that leverages the region's global brand to elevate awareness of local manufacturing capabilities.

3. Research and Innovation

Goal:

Connect to university programs that promote innovation through research and design and encourage entrepreneurialism.

Actions:

- 3.1. Engage with university engineering and product design groups to evaluate research capabilities and foster introductions to the private sector to facilitate partnership and investment.
- 3.2. Support university innovation and design competitions that foster new products for commercialization.

Additional information is available at <http://www.sanjoseca.gov/index.aspx?NID=3471>

Goal:

Engage and convene entrepreneurs, makers, meet-up groups and start-ups that create new opportunities to expand local manufacturing capacity.

Actions:

- 3.3. Support ongoing events and collaborations, such as the “SV Hardware Startup to Scale” meet-up, to promote local manufacturing capabilities to entrepreneurs and support the scaling of local innovation.
- 3.4. Support libraries and other organizations in providing students, entrepreneurs and the broader community with greater access to desktop manufacturing tools and learning opportunities.
- 3.5. Collaborate with industry, professional organizations and universities on conference days highlighting research and design.
- 3.6. Develop and promote events in coordination with National Manufacturing Day that provide opportunities for students and entrepreneurs to learn about local manufacturing operations.

Goal:

Leverage new programs and partnerships to help entrepreneur’s access resources and partners that can support commercialization and scaling of volume.

Actions:

- 3.7. Provide start-up boot camp courses for entrepreneurs, in coordination with partners such as the Product Realization Group. These courses, taught by practicing industry experts, would include a mix of interactive lectures, case studies and student exercises, and would help to local entrepreneurs to accelerate new product development, improve business efficiency, and reduce costs and risk.
- 3.8. Leverage partnerships with other organizations that work with suppliers, such as Small Business Development Centers (SBDC) and the Service Core of Retired Entrepreneurs (SCORE).
- 3.9. Develop and share broadly a manufacturing sourcing platform to connect entrepreneurs with local manufacturers and suppliers.
- 3.10. Provide support through the City of San Jose’s demonstration partnership policy for companies that are seeking and soliciting Small Business Innovation Research (SBIR) grants.

Goal:

Leverage the San José/Silicon Valley iHub and its partner network to provide access to a range of universities, research centers, incubators, accelerators and coworking spaces.

Actions:

- 3.11. Coordinate development activities to extend the region’s traditional incubation model to form a continuum of commercialization services from technology innovation through incubation, development, demonstration, new product introduction and volume production.
- 3.12. Provide a platform for direct referrals between local incubators, accelerators and shared work environments, and continued connections with local product development services that help hardware companies get their products to market quickly and cost-effectively.
- 3.13. Provide opportunities for entrepreneurs, makers and startups to access professional fabrication and prototyping equipment, design software, professional instruction and expert advice (E.g. TechShop).
- 3.14. Provide opportunities to connect entrepreneurs to dedicated hardware accelerator programs that provide support and services including office and shop space, new product introduction services, design and advanced engineering support, and access to supply chain and manufacturing expertise.

Goal:

In partnership with ProspectSV and the San Jose Technology Center, a \$12M facility that was renovated by the City of San Jose that includes \$2.5M in funding from the U.S. Department of Commerce, providing opportunities for emerging technology companies to develop or demonstrate new solutions, conduct commercial-scale pilots, and conduct temporary operations within targeted industry segments.

Actions:

- 3.15. Support ProspectSV in the opening of the San Jose Technology Demonstration Center in Spring 2014, a first-of-its-kind 22,000 square foot facility where innovators can develop or demonstrate new solutions, conduct commercial-scale pilots and demonstrations of clean technologies, conduct temporary operations, and hold events that promote awareness of their company.
- 3.16. Provide a linked, reciprocal program that both develops unique pilot environments for next-generation technology and draws the strongest field of US-based technology companies, research and development institutions, and government leadership available anywhere in the world.
- 3.17. Provide opportunities to access labs, office and meeting spaces, and advanced systems demonstration environments such as its vehicle systems center and SimLab Driving Simulator.
- 3.18. Launch a series of demonstration test beds to transform locations within the region into “Living Laboratories” for next-generation infrastructure and systems to demonstrate future traffic, vehicle, building and energy technology in action within a live setting.
- 3.19. Provide opportunities for emerging technology companies to connect with investors, potential customers, global corporate leaders, and government policymakers.

4. Infrastructure Strategy

Goal:

Ensure an available supply of real estate to provide modern facilities that meet the needs of advanced manufacturers in the region.

Actions:

- 4.1. Work directly with commercial real estate brokers, owners and developers to identify opportunities to rehabilitate, renovate or completely redevelop manufacturing facilities that meet the needs of the region's manufacturing ecosystem.
- 4.2. Encourage the development of new industrial areas and the redevelopment of existing older or marginal industrial areas with new industrial uses, particularly in locations which facilitate efficient commute patterns.
- 4.3. Maintain an inventory and monitor the absorption and availability of real estate suitable for manufacturers to ensure a balanced supply of available land for all sectors.
- 4.4. Ensure that new or rehabilitated industrial developments provide adequately for efficient freight loading and unloading to occur off of public streets.

Goal:

Encourage local municipal partners to preserve, enhance and promote existing and future development opportunities for manufacturing.

Actions:

- 4.5. Encourage partner cities to discourage conversion of lands designated for light and heavy industrial uses to non-industrial uses.
- 4.6. Monitor and discourage the encroachment of incompatible uses into industrial lands, and where possible, minimize the impacts of non-industrial uses on nearby manufacturers.

Goal:

Prioritize projects and policy initiatives that deliver the infrastructure enhancements that capitalize on and support the growth of core regional industries.

Actions:

- 4.7. Collaborate with core industries to identify improvements to provide an efficient infrastructure system.
- 4.8. Work with partner agencies to maintain primary freight routes that provide for direct access for goods movement to industrial and employment areas

- 4.9. Minimize potential conflicts between trucks and pedestrian, bicycle, transit, and vehicle access and circulation on streets with truck travel.
- 4.10. Encourage through truck traffic to use freeways, highways, and county expressways and encourage trucks having an origin or destination to use designated primary truck routes.
- 4.11. Support the efficient and safe movement of goods by rail where appropriate and promote the continued operation of freight rail lines that serve industrial areas.
- 4.12. Collaborate with Mineta San Jose international airport to gain an understanding of existing capacity for air cargo and evaluate opportunities for growth in partnership opportunities.
- 4.13. Evaluate existing freight hubs and analyze their ability to efficiently serve existing industry, and prioritize improvements, enhancements or development of new freight hubs that will lower the cost and reduce time and inefficiencies for users.
- 4.14. Prioritize and encourage the deployment of fiber conduit and infrastructure throughout the region to support the needs of business.
- 4.15. Use available public financing to provide necessary infrastructure improvements as one means of encouraging new investment and revitalization in industrial areas.
- 4.16. Cities will need to pursue regional, state, and federal opportunities to fund the gap in resources to fund required transportation improvements to accommodate intensification of industrial corridors such as north San Jose.
- 4.17. Water utility systems may need to locate and construct additional wells on development sites to secure access to local groundwater as a source.

5. Trade & International Investment Strategy

Goal:

Leverage existing federal, state, and local programs that support international trade and investment.

Actions:

- 5.1. Partner with the U.S. Commercial Service of the U.S. Department of Commerce and the San Jose U.S. Export Assistance Center to provide support to local manufacturers seeking opportunities to export to new and existing markets, including customized and tailored business matchmaking services, background checks on potential overseas business partners, coordination of overseas product launch & splash events, guidance on product localization, logistics, export finance, marketing, and distribution & compliance, advocacy on major projects, and coordination of international business development trade missions.
- 5.2. Leverage local municipal sister cities relationships to increase trade, investment, and people-to-people relationships with international locations, including the newly established tri-party San Jose--Guadalajara--Dublin relationship.
- 5.3. Actively promote Foreign Trade Zone #18 as a means to help businesses reduce production, transaction, and logistics-related costs by lowering or eliminating effective duty rates, allowing special entry procedures, and encouraging production closer to market.
- 5.4. Promote and encourage greater utilization of the California State Trade Export Program.

Goal:

Support and leverage the region's primary exporters to increase the local share of the electronics manufacturing supply chain, and enhance long-term competitiveness and the depth of the export pipeline by encouraging small and medium-sized businesses' export activity.

Actions:

- 5.5. Establish a focused workplan within the supply chain and international trade and investment technical advisory committee, focused on maintaining and protecting the location advantages that differentiate the region in the global electronics marketplace.

Additional information is available at <http://www.sanjoseca.gov/index.aspx?NID=3471>

- 5.6. Perform regional supply chain asset mapping to identify primary and secondary exporters and opportunities to recruit companies to fill supply chain gaps.
- 5.7. Work with SVEDA to integrate export promotion into existing business retention and expansion efforts of municipal economic development activities and provide clear referral channels and contacts within the international trade and export community.

Goal:

Work with key manufacturers to access new markets and will provide market intelligence, product diversification and targeted trade missions and catalyze activity in underperforming export sectors.

Actions:

- 5.8. Identify a limited set of mid to large-size, under-exporting advanced manufacturing companies with the greatest potential for export growth.
- 5.9. Identify opportunities for peer-to-peer export mentoring program by proactive export companies that allows for shared resources, contacts, new business leads, and information.

Goal:

Identify existing industry strengths and potential to expand into related industries to maximize the region's visibility in the international marketplace through international branding and marketing.

Actions:

- 5.10. Promote the “Designed and Made in Silicon Valley” campaign (action 2.11) for exports in electronics manufacturing to the global marketplace, and strategically market local companies and products as solutions for global manufacturing needs.
- 5.11. Internationalize overall regional marketing and branding through collaboration with the over 60 international trade organizations present in the region.

6. Operational Improvement And Capital Access Strategy

Goal:

Provide diverse opportunities for companies of all sizes to leverage and access public and private capital investment opportunities in local manufacturing operations.

Actions:

- 6.1. Coordinate with appropriate financial institutions to highlight available debt capital opportunities suitable and available for the purchase of manufacturing equipment.
- 6.2. Promote all available federal, state and local government grant and loan opportunities that provide working or infrastructure capital.
- 6.3. In coordination with private sector partners and companies that have successfully funded and delivered products, educate entrepreneurs on the opportunities and challenges associated with crowd funding.
- 6.4. Provide more access and exposure to small business innovation research grants to support improved research and development.
- 6.5. Through local economic development partners, provide access to small-scale targeted capital equipment investments that support the ramp-up of small- to medium-scale manufacturing facilities and result in new job generation for local residents.
- 6.6. Provide information and guidance on the California Competes Credit Program that allows businesses to compete for available tax credits based on number of jobs created and retained, in underserved areas.

Goal:

Identify and promote opportunities and programs that directly result in reductions in the cost of operating manufacturing facilities.

Actions:

- 6.7. Work with local utilities (including Pacific, Gas & Electric) by integrating more energy efficiency into the design or upgraded design of buildings, thus achieving energy reduction and lowering costs.

Additional information is available at <http://www.sanjoseca.gov/index.aspx?NID=3471>

- 6.8. Coordinate the promotion of local economic development programs that offer savings and rebates to manufacturers.
- 6.9. Develop programs that reduce the time and cost associated with the local permitting process and result in expedited timelines to minimize impacts on production operations.
- 6.10. Provide information and guidance on the State of California Sales Tax Exemption Program that applies to the state portion of sales tax (4.19%) for the first \$200 million of manufacturing/R&D equipment.
- 6.11. Provide information and guidance on the State of California hiring credit for businesses in census tracts with the 25% highest share of both unemployment and poverty in the State or former enterprise zone areas that hire long-term unemployed workers, veterans within 12-months of separation from service, people receiving federal earned income tax credit, ex-offenders and recipients of CalWorks or general assistance.

Goal:

Partner with Manex consulting to provide a broad array of proven advisory and implementation solutions to manufacturers, distributors, and their supply chains.

Actions:

- 6.12. Work with Manex and manufacturers to leverage federal, state and local workforce grants to provide customized programs and solutions to manufacturers that include: Employment Training Panel (ETP) funded training services, knowledge management, leadership development coaching and training, organization and operations design, nationally recognized lean certification program, and six sigma training.
- 6.13. Provide opportunities for local manufacturers to be featured in the Made in Northern California Program, which is designed to support the manufacturing sector by raising awareness of the products made in the State of California and providing resources for the manufacturing community.