

GIID research & insights for impact

Advancing innovation
districts through
practice-oriented research

April 2025

Introduction

The Global Institute on Innovation Districts (GIID) is transforming how innovation ecosystems evolve worldwide. As a leading not-for-profit organization, GIID conducts independent, practice-oriented research and provides hands-on support to help districts sharpen their competitive edge, turning ambition into impact.

Established by an influential group of researchers and practitioners, we deliver in-depth analysis and strategic guidance to ensure innovation districts reach their full potential. Whether in the early stages or well-established, innovation districts must harness their economic, physical, networking and leadership assets to drive long-term economic outcomes.

Over the past five years, we have invested thousands of hours in deep research, uncovering the critical factors that make districts thrive—and what may be holding them back.

What sets GIID apart?

Our research is more than theoretical—it's designed to drive real-world change. We equip leaders with the actionable insights they need to leverage their strengths, tackle complex global issues and unlock new opportunities.

By collecting and analyzing specific data about districts, cities, and regions, we tailor evidence-based strategies that align with unique economic landscapes and cultural nuances. This ensures our insights are relevant and applicable, aiding decision-makers in navigating their choices with confidence and precision.



Key benefits of engaging in practice-oriented research



Clarity

Pinpoint your unique R&D strengths and specializations, the key assets and actors shaping your innovation ecosystem



Strategic insight

Uncover physical advantages and barriers undercutting your ambitions



Actionable intelligence

Define specific or converging disciplines central to your growth strategy



Leadership assessment

Determine if key players are committed enough to drive change



Implementation support

Strengthen your district ambitions and begin to actualize ideas in the short-term



Validation

Confirm that your organization, institution, or district has the necessary foundational assets to maximize its potential



Expert guidance

Access global advisors to help navigate this complex process

Driving impact where it matters most

Our research empowers leaders of the world's most dynamic innovation districts to become epicentres of transformative solutions for today's most complex global challenges. Across continents, our rigorous research and strategic guidance are catalyzing meaningful change.

- In Monterrey, **distritotec** refined its boundaries using our insights on how to Organize for Success, concentrating focus and investment for maximum impact before expanding. At the heart of distritotec is now the Monterrey Innovation District.
- **Innovation Quarter** (Winston-Salem, US) leveraged our data on Quality of Place and reflective work with our strategic advisors to leverage the Bailey Park node into the district's next phase of development.
- **Oslo Science City** in Norway, used our R&D analysis to form specialized working groups, strengthening industry collaboration and attracting critical funding.
- In South Australia, **Tonsley Innovation District** (Adelaide) is now using our work on effective governance to secure dedicated, long-term financial support.
- **Monash Technology Precinct** outside Melbourne is using our insights to sharpen its industry engagement strategy, attracting key companies reliant on institutional research.

By equipping districts with precision-engineered, data-driven strategies, GIID is helping innovation ecosystems thrive by empowering local innovations to generate worldwide impact.

“The deeper analysis and evidence the GIID team is providing us is really helping us clarify and accelerate our progress.”
— Tom Bentley, Melbourne Innovation Districts

Our Theory of Change

Defining a strategic blueprint for districts

The GIID Framework offers a clear roadmap, outlining the essential assets districts need and the strategies required to unlock their full potential. Innovation districts are seeking more than just guidance—they need an empirical blueprint to frame their evolution.

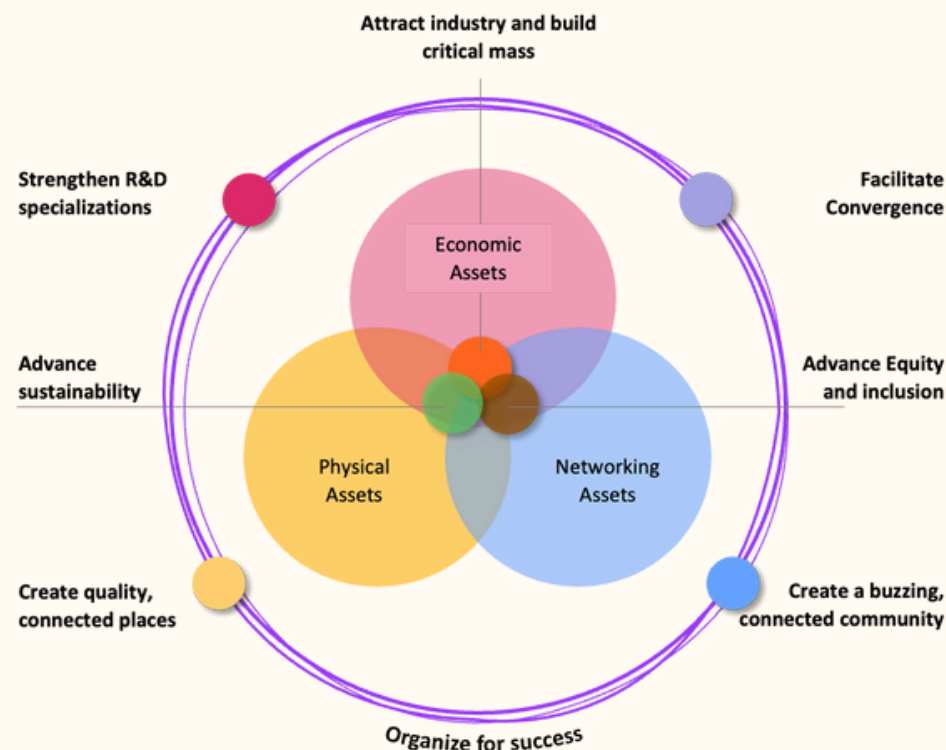
To create thriving innovation ecosystems, districts must strategically leverage their economic, physical and social networking assets through a connected set of strategies deployed over time. Built on over a decade of research, starting at The Brookings Institution and honed through continuous collaboration with districts globally, our Theory of Change provides districts with a comprehensive picture of their path forward.

Our empirical analysis is powered by this Theory of Change. Rather than examining isolated metrics, we analyze innovation ecosystems through this integrated framework, revealing critical interconnections across different assets. This evidence-based approach transforms raw information into powerful insights about how R&D specializations, physical assets, and leadership structures work together to drive innovation outcomes.

This methodology enables us to convert complex district data into actionable insights, crafting tailored strategies that align with each district's unique context and development stage. By applying a structured approach, we develop evidence-based strategies that help districts progress from aspirations to measurable outcomes, ensuring investments deliver maximum impact.

Our Theory of Change empowers district leaders to create integrated and inclusive geographies of innovation, strengthening their Unique Value Proposition through a range of strategies.

Building the Unique Value Proposition for Innovation Districts



GIID research is purposeful and multi-dimensional.

At GIID, we transform raw data into strategic insights that unlock the full potential of innovation districts.

Unlocking your unique R&D strengths.

We conduct a rigorous, multidimensional investigation that reveals the distinctive scientific and technological capabilities defining your innovation district. By positioning your ecosystem within national and global innovation landscapes, we uncover the precise attributes that distinguish your R&D efforts, crafting targeted strategies that ensure your district thrives in a competitive global arena.

Mapping your innovation landscape.

Innovation knows no singular geography. Our expansive research dissects regional innovation ecosystems, providing public sector leaders with a panoramic view that transforms fragmented local geographies into a cohesive, high-impact strategy. We illuminate the intricate connections and unique value of each innovative space, enabling districts to maximize collective potential beyond traditional boundaries.

Leveraging place-based assets for innovation.

Our specialized analysis explores the critical relationship between physical space and innovation potential. We conduct deep examinations of development density, spatial utilization, R&D integration, and district accessibility. Through sophisticated benchmarking against comparable innovation districts, we identify nuanced opportunities for strategic growth and optimization.

Cultivating leadership for organizational excellence.

Recognizing that visionary leadership is the cornerstone of successful innovation districts, GIID provides specialized research into organizational dynamics and governance frameworks. We analyze leadership capabilities with precision, equipping districts with the knowledge and strategic tools necessary to refine their organizational structures and propel their innovation ecosystems forward.

Our findings are presented through meticulously crafted written analyses, intuitive visual representations, and comprehensive data visualizations. Each research deliverable offers a clear, compelling vision for leveraging your district's unique strengths and transforming potential into measurable impact.

Explore our research:

Scan the QR code to learn how insights can unlock the potential of your district.



Our key insights

After a half-decade of intensive research across 70+ innovation districts spanning five continents, we have uncovered profound insights that transform how these ecosystems function and create value.

Our team has analyzed thousands of data points, conducted hundreds of interviews, and mapped countless physical environments to distill what truly drives innovation district success. These five key insights represent the cutting edge of our understanding—revealing both what innovation districts currently are and what they can become when their full potential is unlocked. Each insight is grounded in rigorous empirical evidence and offers actionable intelligence for district leaders seeking to accelerate their impact.

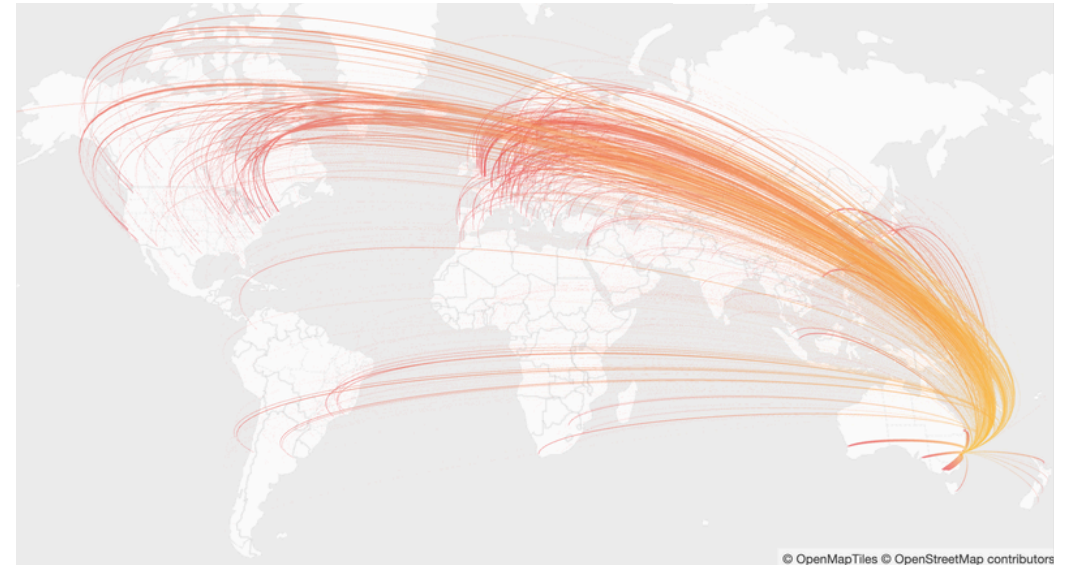
» Districts are globally wired and locally connected

Innovation today doesn't happen in isolation. It emerges at the intersection of global research, local expertise, and cross-sector collaboration. These maps reveal Sydney's Tech Central's global research and business connections—spanning continents, disciplines, and industries—offering a clear window into how innovation districts integrate global ideas into local ecosystems.

By mapping co-authorships, we see how institutions in Tech Central connect with leading universities and labs in North America, Europe, and Asia. These ties aren't passive: they enable active learning, transfer of advanced capabilities, and development of next-generation technologies.

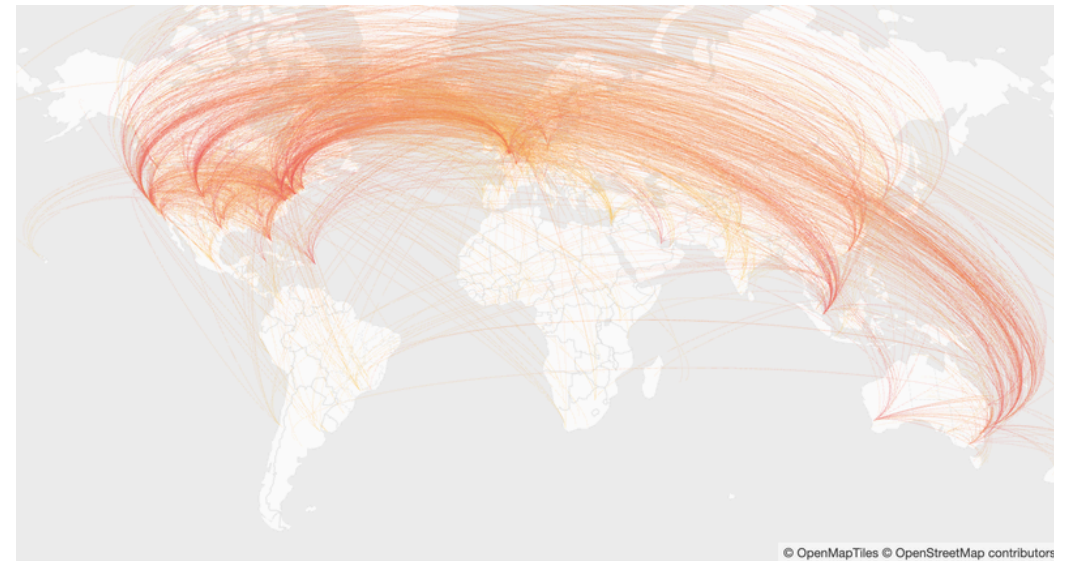
The innovation economy is not just driven by ideas—it's propelled by capital, investment, and strategic partnerships. This second map tracks the business connections flowing into Tech Central from around the world, including multinational subsidiaries, investor relationships, and portfolio ties. These connections ease the flow of information on market trends, disruptive technologies, and technology diffusion.

Tech Central's global research connections



Source: The Global Institute analysis of Clarivate Web of Science, European Commission data, and other sources. • Shows co-authors located within urbanized areas.

Tech Central's global business connections



Source: The Global Institute analysis of DnB Hoovers and PitchBook data on companies, European Commission Joint Research Council data, and other sources.

Convergence drives districts' unique value proposition

In Amsterdam's Knowledge Quarter, discovery is not just about what is known—but how knowledge is applied, recombined, and translated.

This network visualization reveals the intricate architecture of translational research in the Knowledge Quarter, one of Europe's leading life sciences and medical innovation districts. Each node in the network represents a keyword from peer-reviewed scientific articles produced by institutions in the district. Lines between nodes show where these terms co-occur—signaling intellectual relationships or methodological overlaps.

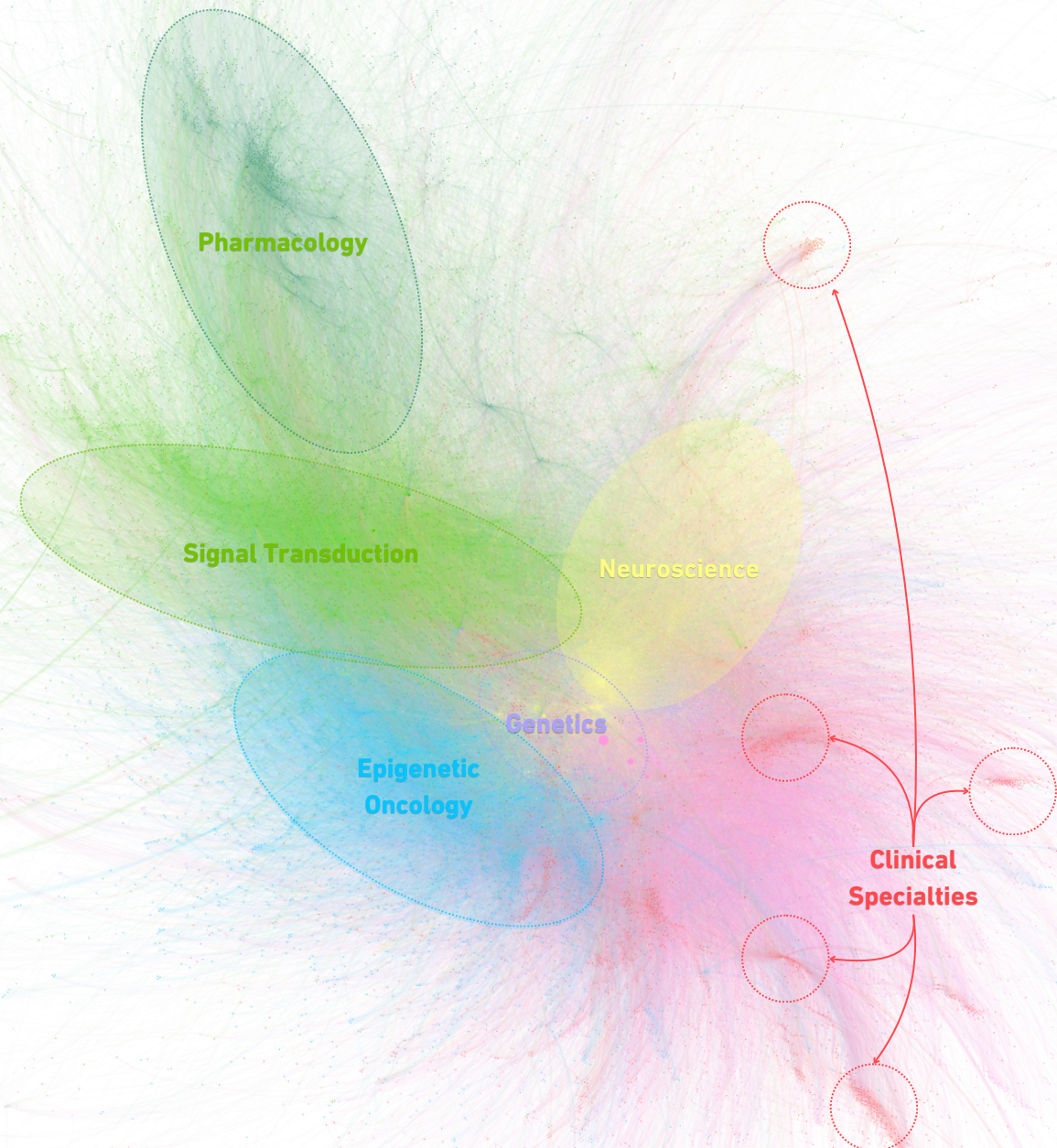
But these are not just any articles. They are translational in nature—research funded or co-produced with industry, cited by patents, or tied to clinical trials. They bridge fundamental science and practical application. By mapping these keywords and their relationships, GIID identifies how translational research and innovation happen—not just what it's about.

What emerges is an integrated, multidisciplinary ecosystem. Clusters reveal expertise in genomics, cancers driven by epigenetic mechanisms, signal transduction, pharmacokinetics and pharmacogenetics, brain science and imaging technologies, and clinical medicine.

Yet what sets the Knowledge Quarter apart is not only the presence of these capabilities but also their convergence. The dense connections among clusters show how imaging techniques are applied to pharmacology, how insights from oncology feed into neurodegenerative disease research, and how basic science is continually translated into clinical and commercial outcomes.

This is the unique value proposition of the district: a translational engine powered by cross-disciplinary collaboration. Here, innovation is not linear—it's networked. It is precisely this tightly integrated ecosystem that enables rapid movement from discovery to deployment.

Through advanced mapping of translational research networks, GIID uncovers the structural drivers of innovation—revealing not just where excellence resides, but how it scales.



Source: GIID analysis of Clarivate Web of Science and Lens data.



Networks and specialization accelerate innovation

Innovation districts speed the journey from idea to invention—by anchoring local knowledge and channeling global breakthroughs.

Innovation doesn't just depend on what we know—it depends on how quickly we can find, recombine, and apply that knowledge. GIID's analysis of inventions emerging from Basel, Switzerland offers compelling evidence that the spatial proximity innovation districts create can accelerate this process in two ways.

First, districts act as local amplifiers of knowledge. A substantial share of Basel's inventions cite research and prior inventions and discoveries generated by local actors—labs, universities, and firms. In fact, in certain fields like biomedical technology, up to 75% of patents cite local knowledge. These local citations are also significantly newer than global citations—meaning local knowledge is found and applied faster.

Second, innovation districts serve as gateways to global knowledge. While local references are highly influential, they represent just a small fraction of total citations. The vast majority of knowledge inputs come from elsewhere—but they reach local innovators through the channels, people, and partnerships that districts make possible.

This dual role is critical:

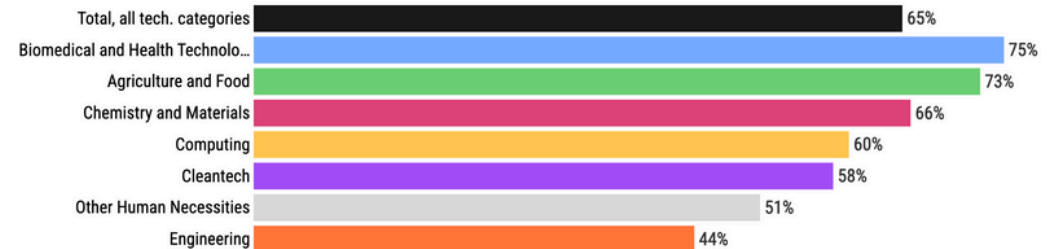
- **Local networks reduce time lags** and increase the absorption of complex, tacit knowledge.
- **Global networks expand the search radius** and ensure exposure to the state of the art.

The result is acceleration—not only in terms of speed but also quality and fit. Innovation becomes more timely, more grounded, and more relevant.

Understanding these nuances is essential for investment and policy. Innovation districts matter not only because they are hubs of activity—but because they uniquely structure the flow of knowledge in time and space.

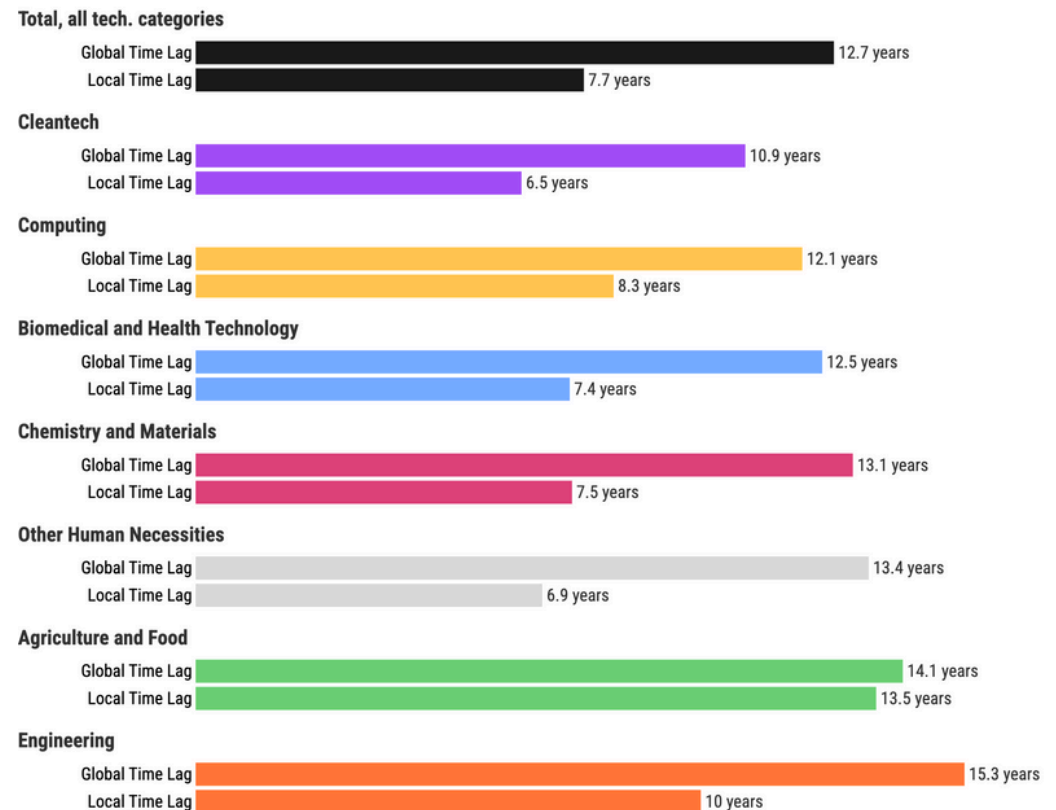
By mapping how knowledge moves, GIID reveals where innovation speeds up—and why innovation districts are so worthy of investment.

Metro Basel's inventions that cite local knowledge



Source: GIID analysis of OECD and Cambia's The Lens data.

Time between a citation and Basel's inventions



Source: GIID analysis of OECD and Cambia's The Lens data.



Mixed-use districts break down innovation silos

Our spatial analysis uncovers compelling patterns in how innovative actors organize themselves. Proximity powers innovation when paired with strategic mixing of disciplines, sectors, and urban functions. GIID's 2024 research reveals that by deliberately breaking down silos, districts accelerate knowledge transfer, creativity, and commercialization.

Concentration fuels collaboration. Place-based strategies that situate different R&D actors in close proximity to one another facilitate collaborative, "open" innovation and foster strong social networks. Within these carefully designed geographies, workers continuously exchange ideas with colleagues, entrepreneurs receive guidance from nearby mentors, and venture capital firms make more informed investment decisions based on direct observation of promising companies.

In places like *Oslo Science City*, Norway, this dynamic becomes particularly evident. Within a 10-minute walking radius, multiple innovation hotspots emerge, where over 200 companies co-locate with four major research institutions within just 50 meters.

Diversity strengthens innovation. Proximity alone is not enough—it's the diversity of actors that amplifies impact. Oslo's innovation district integrates a rich mix of research institutions, mature companies, startups, co-working spaces, and intermediaries. This diversity cross-pollinates ideas, fuels cross-sector partnerships, and bridges the gap between research and real-world application.

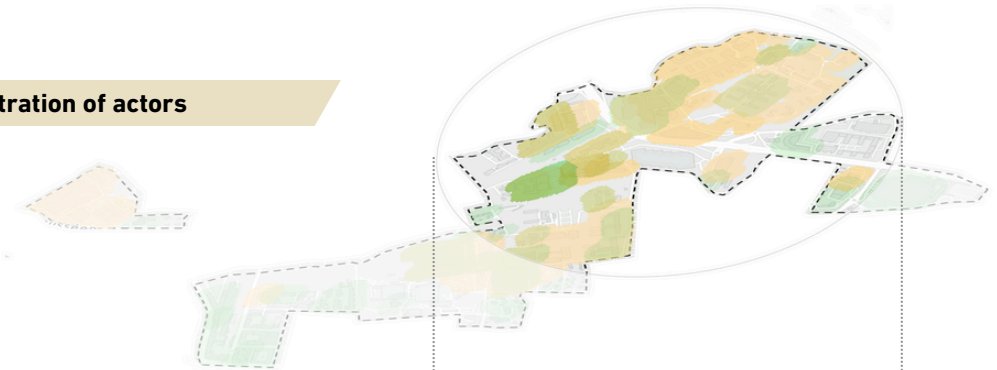
Mixing unlocks new potential. The most advanced districts go beyond clustering—they intentionally blend innovation with housing, retail, and cultural spaces to create vibrant, people-centered ecosystems. This shift fosters collaboration, attracts top talent, and enhances the overall appeal of the district. By embedding innovation within vibrant, walkable areas, districts accelerate the transformation of ideas into marketable products, processes, and services—while also drawing the investment needed to sustain long-term growth.



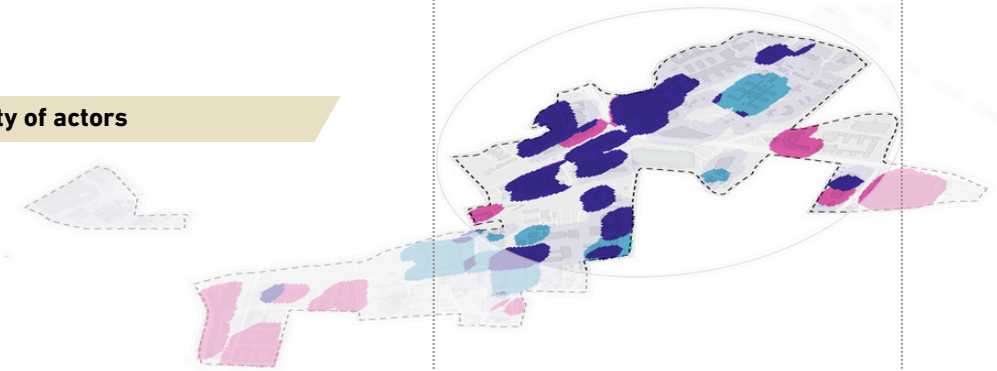
Oslo Science City

0.5 mile = 10-min walk radius

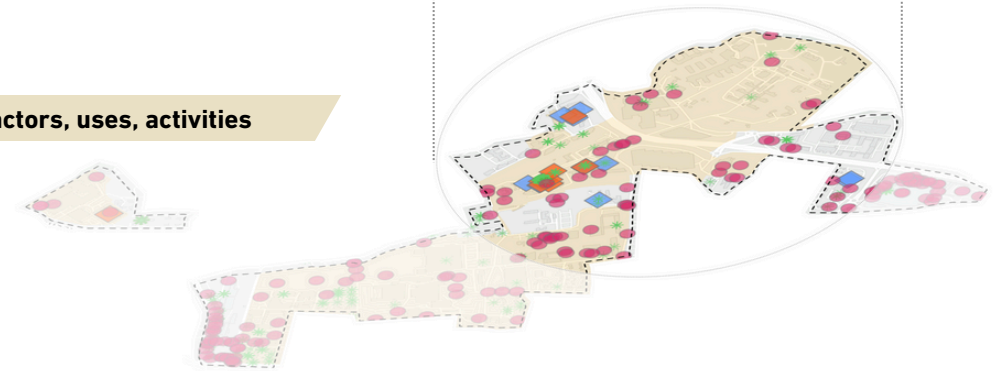
Concentration of actors



Diversity of actors



Mix of actors, uses, activities





Physical form creates unique advantages

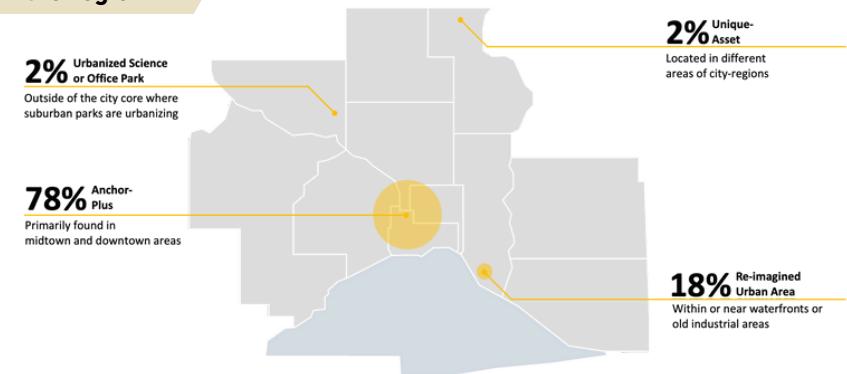
When designed and sequenced well, district place-based assets become *powerful enablers* for advancing and diversifying the innovation ecosystem by drawing and retaining workers and community; increasing knowledge-sharing and network-building; and inviting a diversity of people into places they feel they own and where they feel they belong.

Strategic location creates connectivity advantages. Our research shows 70% of districts are situated in midtown and downtown areas, serving as nexus points for regional innovation. With 91% having direct access to regional transportation networks, they create efficient pathways for talent, ideas, and resources. This locational advantage strengthens knowledge creation and enhances the district's value proposition in our globally connected world, leveraging existing urban infrastructure and established talent pools while maintaining accessibility to partners, clients, and collaborators throughout the region.

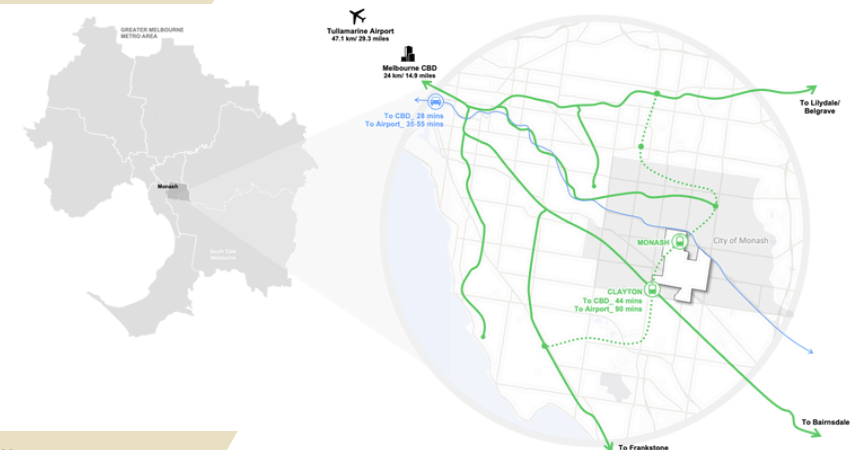
Optimal scale balances diversity and density. Many districts occupy substantial areas, averaging 229 hectares (567 acres)—comparable to New York City's Tribeca neighborhood. District scale is essential for districts to achieve critical mass. Successful districts strike a balance: dense and dynamic enough to generate the "buzz" of a thriving ecosystem, yet cohesive and walkable enough to foster seamless interaction among key players.

Multiple engagement pathways foster inclusion. Over 90% of districts are accessible via multiple transportation modes—walking, biking, driving, and public transit—creating numerous entry points for participation. Successful districts also provide amenities that draw people in, averaging 40 eateries per square kilometer (105 per square mile), which create natural gathering spaces for informal exchange. These features are crucial for physically integrating districts with the local landscape while providing services that adjacent communities need and value.

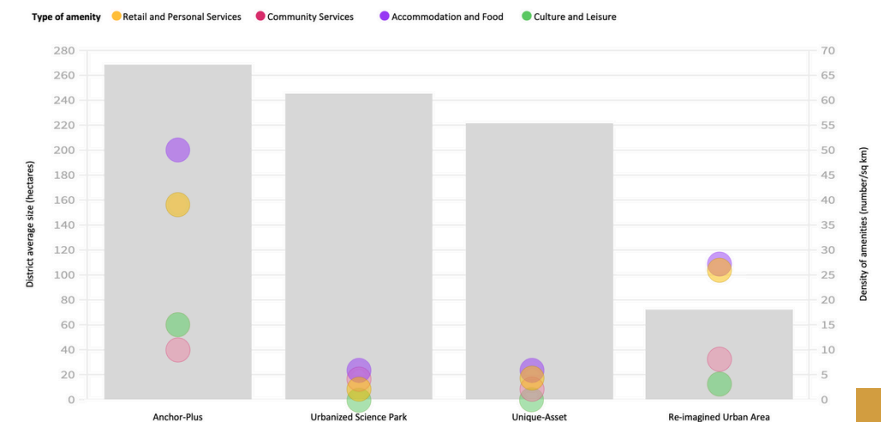
Districts location in the region



Their level of connectivity ...



... and magnetism



Engage with us

Unlock your district's full potential with GIID

In today's rapidly evolving landscape, innovation districts are uniquely positioned to address complex challenges—from decarbonization and economic de-risking to workforce diversification and addressing social inequalities. GIID offers a strategic approach to help your district drive transformative change through practice-oriented research.

Our rigorous empirical analysis transforms complex challenges into actionable strategies. By partnering with GIID, you gain access to insights that illuminate your district's distinctive strengths, reveal hidden gaps, and identify opportunities to accelerate your impact.

Leaders who engage with GIID discover their innovation ecosystem's true potential through a lens that combines global perspective with local understanding. We help you see beyond obvious assets to uncover the unique combination of capabilities that can position your district as a leader in addressing today's most pressing challenges.

Whether you're seeking to strengthen your R&D specializations, optimize your physical environment, or develop governance structures that drive sustained growth, our research team provides the analytical foundation and strategic guidance to transform aspiration into impact.

Connect with our research team today to begin your district's transformation into a powerful force for positive change in your region and beyond.

Contact us

For questions about this research, please contact:

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**Scan the QR code to learn how
GIID insights can unlock the
potential of your district.**



About

The Global Institute on Innovation Districts is a global-reaching not for profit organization dedicated to conducting independent and practice-oriented research on innovation districts—new geographies of innovation emerging primarily in cities and urbanizing areas. Drawing on deep analytics and proven impact, The Global Institute seeks to identify how districts transform into new engines of city and regional economic growth. During a time of uneven growth, our research and work with a global network of districts aims to identify new systems for advancing inclusive innovation.

The Global Institute is comprised of researchers, practitioners, and policy makers working together to help shape the broader research and impact agenda.

Acknowledgements

Generous support to advance independent research and the Global Network is provided by our Founding Partners: Lendlease, a global property and infrastructure group and Ventas, a real estate investment trust; and our Strategic Partners: ZGF, an architecture and planning firm, and TEconomy, an innovation-based economic development consulting group. The opinions expressed in GIID publications are those of the author(s) and do not necessarily reflect the views of our Partners.

The Global Institute would also like to acknowledge the innovation districts serving on our Steering Committee: The Advanced Manufacturing Innovation District in Sheffield and Rotherham, UK; Be'er Sheva Innovation District in Israel; Buffalo Niagara Medical Campus in New York; Cortex Innovation District in St. Louis; Distrito de Innovación de Medellín in Colombia; Innovation District Monterrey in Mexico; Knowledge District Zuidas in Amsterdam; Monash Technology Precinct in Melbourne; Oslo Science City; Pittsburgh Innovation District; and the Innovation Quarter in Winston-Salem.



**We work to accelerate the growth
and evolution of innovation districts worldwide**



Founding Partners



Strategic Partners

