Technology for a Healthier World

Creating Better Ways for Communities to Work Together to Improve Access to Life-Changing Social Services

one degree

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Abstract

This White Paper is addressed to local social service advocates, agencies, providers and policy makers unwilling to accept that children and families should be denied life-changing social services because communities lack the "no wrong door" digital systems necessary to effectively engage and enroll them.

America's social safety net protects individuals and communities from social and economic distress. It is fundamental to a healthy society and for the past 25 years the national 211 network has served as the system of record to help tens-of-millions of Americans find and access these life-changing benefits and services. Over the last decade, however, this historically not-for-profit Information & Referral (I&R) ecosystem has been buffeted by political, commercial and technological change. These changes once promised to modernize and transform how social services are coordinated and delivered; but flawed assumptions, siloed systems and frustrated users have left those promises unfulfilled.

This White Paper examines the fractured state of today's ecosystem, highlighting how competing commercial technologies—despite their promise to transform the I&R field—have created incompatibilities that have deepened fragmentation and frustration.

The emerging Community Information Exchange (CIE) movement, led by 211 San Diego, offers an alternative to this status quo that envisions a coordinated technology ecosystem governed by trusted local backbone organizations.The vision is promising, but the movement has struggled to gain traction, in part, because of the technological costs, complexity and limitations of replicating the customized CRM that serves as the platform for 211 San Diego's CIE®.

The paper makes the case that backbone organizations need and want alternatives and that next-gen I&R solutions to serve them are within reach. These solutions will need to synthesize lessons from existing platforms, leverage the transformative power of AI, and address the key functional requirements necessary to build technology for a healthier world.

Executive Summary

Technology for a Healthier World: The Future of America's Digital Information & Referral Ecosystem

A Vital Public Asset at a Crossroads

For more than two decades, the Information & Referral (I&R) ecosystem has been a cornerstone of America's social safety net. Anchored by the FCC's 2000 designation of 2-1-1 as the national dialing code, over 200 local nonprofit providers now cover 99% of Americans and in 2024 fielded 16.8 million service requests. These providers, supported by state, local, and philanthropic funding, deliver access to life-changing services such as affordable housing, food pantries, mental health care, child care, financial aid, and more.

The strength of this system lies in its community governance and trusted local networks. Yet these very strengths have also left the field vulnerable to disruption as technology and expectations evolve.

From Information Discovery to Service Delivery

The I&R ecosystem was transformative when it centralized local social service data for public access. But today, stakeholders expect more. Much like the internet's shift from *search engines* to *social networks*, communities now seek platforms that not only provide information but also **coordinate service delivery**, **support collaboration**, and **track outcomes**.

Commercial and Technological Disruption

The **Affordable Care Act (ACA)** in 2010 emphasized outcomes-based healthcare and highlighted the cost of unmet social needs, driving demand for stronger links between healthcare and community services. Federal Medicaid funding, especially during the pandemic, accelerated this shift.

Well-funded commercial technology vendors quickly entered the I&R space, using aggregated data to launch **closed-loop referral (CLR)** platforms. These tools promised to connect healthcare and government agencies to local networks of community-based organizations (CBOs), enabling providers to "close the loop" on referrals. While these platforms demonstrated technical innovation, their rise has deepened fragmentation between nonprofit I&R providers and commercial entrants.

The Limits of Legacy Systems

Legacy I&R platforms, designed primarily for **211 operators** and **resource managers**, were later adapted for self-service online searches. While effective at serving the general public, they fall short in addressing the needs of new institutional customers such as healthcare and government. These customers require:

- **Customized, decentralized solutions** for distinct populations.

- **Closed-loop referral and care coordination** capabilities.

- **Enterprise-level integrations** with EHRs, CRMs, and compliance with standards like HIPAA and FHIR.

Without these capabilities, legacy systems cannot compete effectively in today's market.

Why Commercial CLR Solutions Are Still Struggling

Despite technological advantages, commercial CLR platforms face structural challenges:

- **Over-promised CBO adoption.** Designed around the needs of healthcare and government purchasers, these platforms often function as compliance tools rather than supportive systems for CBOs. Adoption has been minimal: in California, fewer than **4,000 of 156,000+ nonprofits** are engaged, undermining the promised network effects.

- **Competitive stalemates.** In markets like Los Angeles, multiple platforms compete simultaneously, diluting value and burdening CBOs with duplicative participation. Some states, such as New Mexico, have tried statewide single-vendor systems, reflecting frustration with fragmented markets.

- **The false promise of interoperability.** Vendors promote integration with vertical systems (like EHRs), but remain **incompatible with each other**, forcing CBOs to maintain multiple accounts. True **horizontal interoperability**—like that in telecom—has not emerged naturally from competition.

A Path Forward: Community-Led Infrastructure

The **Community Information Exchange (CIE®)** model pioneered by 211 San Diego offers a glimpse of what coordinated, community-governed infrastructure can achieve. By acting as a trusted backbone, it has demonstrated the potential of shared systems that connect stakeholders across sectors. However, its reliance on a heavily customized CRM has limited replicability and scalability.

Next-Generation I&R Infrastructure

The solution lies not in outdated legacy platforms or siloed commercial systems, but in building **shared, next-generation digital infrastructure** designed for communities. Key functional requirements include:

- **Moving beyond legacy limitations** with decentralized deployments, closed-loop referral and care coordination, and modern compliance standards.

- **Reimagining the value proposition for CBOs** by delivering tangible benefits such as AI-enabled enrollment flows that streamline intake, eligibility, and reporting.

- **Solving for horizontal interoperability** through an open, API-first framework that provides vendor-neutral access to shared services.

A New Narrative for Change

The debate over the future of I&R often polarizes around nonprofit resistance to innovation versus commercial privatization. This paper advances a more constructive path: **collaboration through shared infrastructure**.

Change will require new allies, new governance approaches, and a willingness across sectors to acknowledge the limitations of both legacy systems and commercial walled gardens. America already has a national I&R backbone—211—and with the right digital infrastructure, it can evolve into a truly interoperable ecosystem that supports children, families, and communities nationwide.

A Brief History of the Information & Referral Ecosystem

The Information & Referral (I&R) ecosystem is a well-defined field in the U.S. that was shaped and defined by a Federal Communications Commission (FCC) ruling in 2000 designating '211' as a national dialing code to connect callers to local "community information and referral services."

This ruling created a national framework, administered by the States, that authorizes selected organizations – mostly nonprofits – to serve as exclusive I&R service providers at the local level. In California, for instance, the Public Utilities Commission (PUC) oversees this framework and determines, on a county by county basis, a designated 211 I&R provider. There are over 200 independent 211 service providers across the country covering 99% of Americans. In 2024 it served 16.8 million requests.

This non-commercial, public-interest information infrastructure is funded by a combination of state, local and philanthropic sources and enjoys significant support and leadership from its dedicated network of local providers, United Way Worldwide, and the national I&R professional association, Inform USA.

This community infrastructure is a vital public asset, governed by local organizations, to help people in need find life-changing social services. For more than two decades it has provided convenient access to information about local resources including affordable housing, food pantries, mental health support, job training, after school programs, legal advice, financial aid, child care and more.

The enormous breadth and diversity of this network is remarkable, but its greatest strengths have also made it vulnerable to change.

From Information Discovery to Service Delivery

Over the past decade the I&R space has been fractured by a growing demand – shared broadly by individuals, governments, nonprofits, policy makers, healthcare providers and insurers – to move the field from information *discovery*, to service *delivery*. Twenty-five years ago, collecting, organizing and maintaining a publicly accessible directory of local social service data was *transformative*. Centralizing valuable local information made it easier to search and *discover* available programs and services.

Three decades into the digital age we have come to expect that – and more. Online services are no longer just databases of searchable information, they are social networks and platforms to connect, collaborate and engage. Today stakeholders in the I&R ecosystem are not just looking for access to reliable social service data, they are also looking for solutions that allow them to *coordinate* and *collaborate* with the people and organizations *delivering* those services.

These shifting expectations from *discovery* to *delivery* are disrupting the status quo in the I&R field in ways that parallel the broader digital transformation of the web from the dominance of 'search engines' in Web 1.0 to the explosion of 'social networks' in Web 2.0.

Commercial and Technological Disruption

The passage of the Affordable Care Act (ACA) in 2010 sparked a transformative wave in the healthcare landscape, placing a newfound emphasis on outcomes-based health and underscoring the financial significance of unaddressed social needs, or what has become known as the Social Determinants of Health (SDOH).

The ACA's directive to enhance patient outcomes and reduce healthcare costs pivoted on the assumption that healthcare providers could be incentivized to not only treat illnesses but also to prevent them, by delivering upstream social services provided by local community-based organizations. This shift, accelerated during the pandemic by federal Medicaid funding available to improve the coordination of services between healthcare and the social sector, sparked an influx of commercial interests entering the historically non-commercial I&R space.

A number of well-funded technology start-ups – buoyed by the promise of healthcare dollars – moved quickly to aggregate publicly available I&R data and use that as a foundation to develop new *coordination* and *delivery solutions* for healthcare and public sector clients. These new solutions are often referred to as '*closed-loop*' referral services because in theory they allow service providers receiving a referral to 'close the loop' with the healthcare organization that sent it.

What has made these commercial platforms different from traditional I&R services is that they promise to provide customers with technology to connect their patients/clients, not only to information about local social services, but *also* to a *service delivery* network. A network to be made up of local providers working together to coordinate the delivery of social services at scale.

The Functional Limitations of Legacy I&R Technology Platforms

The rapid influx of these new technologies has been disorienting for local, not-for-profit I&R providers operating on legacy I&R technology platforms. The growing technological asymmetry between old and new is disrupting the field as public and private interests collide.

At its most extreme, private I&R technology solutions are scraping information from not-for-profit 211 providers and then using that data to compete against them for funding and service contracts. Despite their longstanding role in the community, most 211 providers have been unable to respond effectively because they lack the technology platforms needed to compete with the commercial vendors. To make matters worse, because 211 data is thought of as a *public good*, commercial providers have been able to *free-ride* on that information to externalize the costs of acquiring and maintaining it.

While the commercial providers are nowhere near capturing the full I&R market in the U.S., they have selectively demonstrated the capacity to solve real social service delivery problems that legacy systems cannot. The commercial providers have been most successful pursuing opportunities where they have been able to cater to the evolving needs of healthcare and public sector customers with technology innovations not yet available on legacy 211 platforms.

There are three broad I&R functions that differentiate commercial solutions from legacy 211 systems:

Customized Deployments and Decentralization

The first function that differentiates commercial I&R platforms from traditional 211 services is the capacity to serve the needs of institutional customers seeking customized and decentralized I&R solutions to serve their patients and clients.

Legacy 211 technology systems were originally designed to serve two primary customers: 211 phone operators and resource managers. As a phone-based system the original platforms were optimized to support staff working to organize and manage local social service data and then to make that information easily accessible to 211 operators to share with clients on the phone. As the web gained traction in the early 2000's these platforms evolved to also serve a third customer – individuals searching for services online. Today most 211 providers operate on platforms that serve these three distinct use-cases from a centralized local database.

While these systems are good at serving the population at-large what they are not designed to do well is serve the emergence of government and healthcare as a fourth customer segment. These institutional customers have very different needs from existing 211 stakeholders. In particular, because they serve specific populations, they need solutions that can be customized to enable them to provide resource navigation services directly to their clients – rather than routing them through a 211 call center or website..

The commercial providers offer a menu of services that lets clients like these create solutions that are focused on particular populations and have the administrative tools for decentralized resource navigation. Solutions that can be configured to serve a particular client base like, for instance: Medicaid patients, foster youth, special-needs caregivers, older adults, those at risk of homelessness, specialized resource navigators, etc. The commercial players are leveraging modern systems architecture to respond to this demand for customized and decentralized I&R solutions.

Closed-Loop Referrals and Care Coordination

The second function that distinguishes commercial solutions from legacy systems is the capacity to support closed-loop referrals and care coordination.

Healthcare and public sector customers are demanding technology solutions that not only provide accurate and up-to-date information on local social services, they are also demanding solutions that improve the coordination and delivery of those services. As one example, in California, the Department of Health Care Services (DHCS) is piloting a requirement that all

managed care plans (MCPs) serving Medi-Cal patients implement 'closed-loop-referral' (CLR) systems by June 30th, 2025. MCPs have been responding by launching a patchwork of commercial CLR systems across the State that connect each MCP to a bespoke network of community based organizations (CBOs) contracted by the MCP to provide an approved list of health-related social services like medically-tailored meals, housing navigation, and asthma remediation.

Local government agencies, like those serving children and families, vulnerable populations, seniors, etc. are also exploring better ways to reliably connect their clients to local social services and the CBOs they contract with. The prevailing frustration is that in a world of modern technology accessing local social services remains a time-consuming, manual process that is still operating on a pre-internet technology ecosystem of phones, faxes, PDFs and spreadsheets. The promise of scaling a cross-sector referral platform to improve the delivery of social services has been a captivating – though elusive – vision driving investment in commercial I&R technologies.

System Integrations & Compliance

The third broad area of functionality that has separated commercial solutions from existing public I&R infrastructure is the ability to integrate with other systems and comply with relevant technology standards like the Health Insurance Portability and Accountability Act (HIPAA).

The success of many modern technology solutions depends on the ease with which it can integrate with other systems to send and receive data. Application Programming Interfaces (APIs) have become a standard feature in commercial technologies allowing clients to configure internal systems to interoperate with each other. In the I&R space the primary point of integration has been with MCPs connecting their commercial CLR platforms with patient information stored in their Electronic Health Record (EHR) database. These types of integrations typically conform to the Fast Healthcare Interoperability Resources (FHIR) standard for exchanging electronic health information between systems. The other common integration point for an I&R solution is with a client or agency's Customer Relationship Management (CRM) database of record, Salesforce, or Microsoft Dynamics 365, for example.

Selling enterprise contracts to healthcare and government agencies typically involves a lengthy procurement process that requires a full security and compliance review by a professional team responsible for ensuring that all third-party systems have met rigorous compliance standards. In the I&R space this generally requires solution providers to undergo

an annual security and compliance audit conducted by an independent evaluator. This documentation along with a detailed security questionnaire is a standard part of the contracting process and a significant barrier to entry for 211s seeking to compete in the changing I&R marketplace.

So Why Have Commercial I&R Solutions Struggled to Live Up to Expectations?

Given the clear technological advantage commercial I&R vendors have enjoyed relative to existing I&R providers, it is not widely understood how and why these solutions still struggle in the marketplace. But as these systems have aged a number of critical failure points and false assumptions have been exposed.

Over Promising CBO Adoption & Engagement

Perhaps the biggest single strategic vulnerability for the existing commercial I&R providers is that they have all significantly overestimated and overpromised CBO adoption. The prevailing thesis has been that new network technologies would transform the capacity of government agencies and healthcare to collaborate with local social service providers to improve social, economic and health outcomes. In practice, though, the commercial networks have been less about collaboration, than compliance, for CBOs. The closed-loop referral networks mandated in California by DHCS, for instance, are essentially administrative tools for the managed care plans to get the digital "paperwork" they need from CBOs to bill the State for Medi-Cal services.

Since the CBOs expected to use these systems are not paying the bills for them they have very little influence over how they are built. This reality, and the corporate indifference that often comes along with it, has alienated many CBOs and left them far less excited about the imposition of these new platforms than the agency's requiring them, or the companies funding them. This has exposed the strategic reality that the fate of these high-tech platforms is not really about the tech, it is about who agrees – or is required – to use them. According to

the latest data from DHCS, in a state with 156,354[1] 501(c)(3) public charities fewer than 3,974[2] (even with generous double-counting) are engaged.

The underlying problem is that these systems have not been designed around the needs of CBOs, they have been designed around the needs of the healthcare and government agencies paying for them. Unsurprisingly, these products are not growing organically with CBOs.

As these systems have matured, the weakness of the CBO value proposition has drawn unwanted attention from critics and put the commercial platforms in the uncomfortable position of explaining to customers why more CBOs aren't using the multi-million dollar collaboration platforms they are paying for. It is also undermining the investor thesis which values these companies using the compounding economic value of a network at scale. Since networks are only as valuable as the number of people using them – a lack of CBO engagement is both a strategic and an economic problem that still needs solving.

A Competitive Stalemate Constraining Growth

Another critical failure point for the commercial I&R solutions is that they are increasingly operating in communities where the competition between competing networks has produced a stalemate constraining growth. Network business models are unique in that they typically result in a "*winner-take-all*" dynamic for the network that scales most quickly. However, this doesn't always happen. The current I&R ecosystem is a good example of a market where none of the competing networks has been able to reach a tipping-point to become the dominant solution. The competition between commercial solutions in today's I&R landscape is a case study in friction and frustration.

Take a market like Los Angeles, for instance, where there are at least a half a dozen I&R platforms competing for market share. If you are a stakeholder in that market, like a local social service CBO, lots of small, competing networks does not make things better or more efficient, in fact, it marginalizes the value of any one network while adding to the cost and inconvenience of being expected to participate in all of them.

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[1] Internal Revenue Service, *Exempt Organizations Business Master File Extract (EO BMF)*, accessed September 23, 2025, https://www.irs.gov/charities-non-profits/exempt-organizations-business-master-file-extract-eo-bmf

[2] California Department of Health Care Services, *CalAIM Enhanced Care Management Provider Contracts Dashboard*, StoryMap, accessed September 23, 2025, https://storymaps.arcgis.com/collections/a07f998dfefa497fbd7613981e4f6117?item=7

In some States, like New Mexico, the public sector has stepped in to try and avoid the dysfunction of a competitive stalemate by adopting a statewide single-vendor system. Time will tell whether this strategy works. For now, if nothing else, it reflects a growing unease among policy makers that the invisible hand of free-market competition will ultimately resolve the problem.

The False Promise of Interoperability

A third critical failure point of commercial I&R solutions is the blowback from early customers, particularly in the public sector, who did not foresee that their vendor's commitment to "*interoperability*" did not include "*interoperability*" with competing systems. This belated appreciation for the subtle distinction between *vertical interoperability,* where complimentary systems can be configured to work together, and *horizontal interoperability,* where competing systems play nice with each other, has had a chilling effect on the market.

This is particularly true for public sector customers who have realized that their interest in scaling community wide interoperable networks is currently at odds with the interests of commercial vendors. While all of the commercial solutions emphasize their interoperability with a wide variety of systems, they all remain incompatible with each other.

The burden of a networked I&R ecosystem without *horizontal interoperability* falls disproportionally on busy CBO service providers expected to create and maintain accounts on multiple incompatible systems. To make matters worse the sophisticated *vertical integration* solutions available on all the commercial solutions often do not apply – or are prohibitively expensive – for CBO account holders.

It is a helpful reminder to decision makers and policy advisors that the *horizontal interoperability* we enjoy in other markets, like telecom, is not a natural outgrowth of competition. It generally requires a nudge from one of the other sectors.

What Now? Bringing Communities Together to Change Lives

The turbulence in the information and referral ecosystem over the past decade has left social service stakeholders – and the communities they serve – without the digital systems necessary to improve the coordination and delivery of services for children, families and those in need.

The bright spot in this otherwise frustrated landscape is San Diego. The emerging Community Information Exchange (CIE) movement, led by 211 San Diego, and modeled on Health Information Exchanges (HIEs), offers an alternative to the current status with a coordinated technology ecosystem governed by a trusted local backbone organization. Instead of a patchwork of incompatible products, the movement envisions shared digital infrastructure to bring communities together to improve service delivery. The vision is promising, but the movement has struggled to gain traction outside of San Diego. One of the key barriers constraining growth is the absence of affordable, flexible and scalable digital solutions to serve would-be backbone organizations modeled on 211 San Diego's success.

The specific challenge is that 211 San Diego's CIE® is platformed on a highly customized version of a commercial Customer Relationship Management (CRM) solution. While the platform has worked in San Diego, it has been difficult and costly to replicate in other markets. While San Diego has been able to configure its CRM to work as a platform for their CIE®, a traditional CRM is not a natural fit for a modern web-service and is not well-suited for ongoing web development and innovation.

Next-Gen I&R Infrastructure

A lack of shared digital infrastructure is a primary source of dysfunction in the current I&R landscape. Filling the infrastructure gap is why San Diego has been successful, where others have not.

Giving other communities the digital tools they need to fill the infrastructure gap is an essential building block to improving access to services in our digital world. But if we do not yet have the right platform to fill that gap, what will the right platform look like?

As a reference we have explored other domains where *horizontal interoperability* is essential, like telecommunications and banking. Ten years ago a siloed and incompatible landscape of banking technologies was preventing the development of multi-bank fintech solutions. The friction and fragmentation was ultimately overcome iwith developer-friendly infrastructure solutions like *[Plaid](#)*. In thiis case, Plaid embraced an Application Programming Interface (API)-forward strategy that has created a framework for *horizontal interoperability* between competing banks that few imagined possible.

The explosion of AI innovation, and the dismantling of top-down federal funding, has created a window of opportunity to develop and pilot the digital infrastructure solutions needed to transform how life-changing social services are delivered.

The key to developing successful next-generation I&R infrastructure, however, is not to focus on the technology, it is to focus on the problems the technology needs to solve.

Key Functional Requirements

The key functional requirements for digital solutions will come from the needs of stakeholders and the friction points that currently constrain the development of high-impact service delivery solutions. At a minimum, next-generation I&R infrastructure for backbone organizations will need to:

Move Past the Limitations of Legacy I&R Platforms

As a starting point, the technology stack will need to move past the functional limitations of legacy I&R platforms. This work will be informed by the functionality needed to accelerate the broad evolution of the I&R ecosystem from *information discovery* to *service delivery*. As discussed above this will include a digital framework that is designed and engineered to support *Customized Deployments* and the *Decentralization* of referral management to both government agencies and health care. It will support *Closed-Loop Referral and Care Coordination networks*; shared data use and governance agreements; and compliance with relevant security, privacy and data exchange standards including, at a minimum, SOC 2, HIPAA and FHIR®.

Reimagine the Value Proposition for Social Service Providers

The next-gen infrastructure will also need to successfully reframe and strengthen the value proposition for social service providers using the infrastructure. The current value proposition – which suggests that closed-loop referral networks are about helping CBOs collaborate more effectively with their cross-sector partners – is no longer squaring with the CBO experience of these solutions as ad hoc reporting tools.

There are several promising new approaches to this challenge. One of the most compelling is to use AI-enabled conversion tools to empower CBOs to simplify and streamline intake paperwork. Imagine a future with free and easy-to-use account services that would instantly convert a CBO's existing enrollment forms into smart and secure client registration flows. Flows that would make it easier for staff to manage eligibility and enrollment status for their clients.

Since innovations like this would be built on open infrastructure, an unlimited number of solutions could be built on top of these registration flows without requiring CBOs to create and manage multiple intake solutions.

Solve for Horizontal Interoperability

The signature value of investing in public digital infrastructure for the I&R ecosystem is to create a framework for vendor-neutral *horizontal interoperability* that would serve – as is understood in the telecommunications space – as a "common carrier."

To enable backbone organizations to successfully serve as a *common carrier* we envision an API gateway that will support access to both social service data and interoperable referral/enrollment services. At scale this would mean any authorized 3rd party solution would have "*fair, reasonable and non-discriminatory*" access to common CBO-facing services. The framework would be open and voluntary, inviting existing competitors and new solutions providers to leverage shared infrastructure as an alternative to the "walled garden" strategy of commercial providers.

We envision AI-friendly API endpoints and infrastructure that, like *Plaid*, creates a framework for interoperability without requiring a regulatory mandate. In fact, while we hope that local decision makers and public sector leaders will voluntarily include *horizontal interoperability* clauses into their I&R related procurement processes, we think top-down mandates, at this point, will be counterproductive.

The success of the I&R infrastructure envisioned here will not be directly dependent on regulatory action, ultimately it will be dependent on lowering the cost and accelerating the adoption of a new-generation of high-impact I&R solutions. Infrastructure to transform a fractured and dysfunctional digital landscape into a competitive interoperable ecosystem of cross-sector delivery solutions.

A New Narrative for Change

Despite widespread agreement that America's social service delivery system needs fixing, blame for why it's broken generally falls into one of two – not particularly helpful – camps.

The first camp, typically for-profit stakeholders, blame nonprofits and social sector actors for a misguided resistance to innovation and change. The second camp, typically not-for-profit stakeholders, blame corporate greed and the evils of privatization. Unsurprisingly, the first camp holds dear to the argument that accelerating privatization of I&R solutions will improve outcomes, while the second camp harbors the conviction that stopping it will.

This white paper advances an alternative narrative—one grounded in the recognition that while cross-sector coordination is challenging, it is not impossible. The analysis presented here is not concerned with assigning blame, but with identifying more effective solutions.

Change will require attracting new allies, advocates and funders. It will require public sector stakeholders to think differently about *interoperability*; private sector stakeholders to think differently about their *strategies for success;* and existing I&R providers to acknowledge the limitations of *legacy systems*.

Leadership for the development of the digital infrastructure needed to better serve our communities could come from any sector. It could come from commercial rivals putting their differences aside to form a coalition to solve a common problem. It could come from a local government agency, or an administrative body like the Los Angeles County Chief Executive Office. Or it could come from local social sector leaders frustrated with the status quo.

Change can come from anywhere, but America already has national I&R infrastructure, so why not start there, with local partnerships and pilots ultimately aimed at a system-wide technology upgrade.

Conclusion

The Information & Referral (I&R) ecosystem has played a vital role for more than two decades in connecting millions of Americans to essential services through a trusted nonprofit-led, public-interest infrastructure. Yet, the field now finds itself at a crossroads. Legacy 211 systems, though deeply embedded in communities, have not kept pace with the technological and structural demands of modern service delivery. At the same time, commercial entrants have brought innovative new technologies but have failed to secure broad adoption from community-based organizations (CBOs) and have become locked in a competitive stalemate.

This paper argues that the solution lies not in doubling down on fragmented commercial systems or settling for outdated legacy platforms, but in building shared, next-generation digital infrastructure designed to serve the entire ecosystem. The key requirements include:

- ***Customized and decentralized deployments that meet the needs of institutional customers without sidelining community providers.***

- ***Closed-loop referral and care coordination systems.***

- ***A reimagined CBO value proposition where participation creates real benefits, not additional compliance obligations.***

- ***Open, API-first infrastructure that supports vendor-neutral, horizontal interoperability and empowers communities to customize their own solutions.***

Ultimately, the path forward is less about choosing sides between commercial and nonprofit providers, and more about creating the conditions for collaboration at scale. With the right infrastructure, the I&R field can evolve from information discovery to true service delivery—transforming a fractured landscape into an interoperable ecosystem that improves outcomes for children, families, and communities nationwide.

About One Degree

One Degree is an Oakland based nonprofit building technology solutions for a healthier world.

The organization was founded in 2012 by Rey Faustino based on his own experiences as a young adult struggling to help his family navigate the challenges of the social safety net in Los Angeles. Rey believes everyone deserves an opportunity to thrive and that is why One Degree is committed to empowering people to build healthy and fulfilling lives by transforming how life-changing social services are discovered and delivered.

One Degree envisions a social safety that brings communities together to better serve those in need. A social services ecosystem with the digital infrastructure needed to take on the social challenges they face everyday. Challenges that are eroding the economic mobility of millions of Americans. In the U.S. 28 million people, including 12 million kids, are food insecure; 1 in 5 adults live with a mental illness, and less than half are receiving care; 61 million live with a disability; as much as 80% of the $4.9 trillion spent on healthcare is driven by social determinants; and nearly a million people in the U.S. experienced homelessness in 2024.

We are public-interest technologists who believe we can and must find better ways to scale technology solutions that change lives. Today the One Degree platform (1degree.org) is doing its part by designing digital solutions that make it easier for communities to organize, coordinate and deliver essential social services and benefits in Los Angeles, the San Francisco Bay Area, and NYC. One Degree's user-friendly public resource directory at (www.1degree.org) serves hundreds of thousands of individuals a year; while its state-of-the-art enterprise referral platform is transforming how the public and social sectors are collaborating to serve people in need.

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