City of Santa Fe

AGENDA

ECONOMIC DEVELOPMENT ADVISORY COMMITTEE AUGUST 11, 2021 AT 11:00 AM ATTEND VIRTUALLY

SPECIAL PROCEDURES FOR ECONOMIC DEVELOPMENT ADVISORY COMMITTEE MEETING

Attendance: In response to the risks identified in the State's declaration of a Public Health Emergency and the Mayor's Proclamation of Emergency and the emergency orders issued to reduce those health risks, Economic Development Advisory Committee meeting will be conducted virtually.

Viewing: Members of the public may join the Zoom meeting by internet or phone, as follows:
Internet: To join the Zoom meeting on the internet using a computer, laptop, smartphone, or tablet, use the following link: https://santafenm-gov.zoom.us/j/96587819732?pwd=Q3prT3VpM3BSa3RUei9UQVBuVUYwZz09.
Passcode: 449731
Attendees should use the "Raise Hand" function to be recognized by the Chair to speak at the appropriate time.
Phone: To join the Zoom meeting using a phone, use the following phone numbers and Webinar ID: **US: 1 (346) 248-7799 - Webinar ID: 965 8781 9732 - Passcode: 449731**
Phone attendees should press *9 to use the "Raise Hand" function to be recognized by the Chair to speak at the appropriate time.
The agenda and packet for the meeting will be posted at https://santafe.primegov.com/public/portal.

1. **CALL TO ORDER**
2. **ROLL CALL**
3. **APPROVAL OF AGENDA**
4. **APPROVAL OF CONSENT AGENDA**
5. **APPROVAL OF MINUTES**

a. July 14, 2021

6. **ACTION ITEMS: CONSENT**

7. **ACTION ITEMS: DISCUSSION**

8. **PRESENTATION**

a. STIR Labs UNM Summary Report (Manuel Montoya, Associate Professor, International Management, Department of Organizational Studies, mrmonto@unm.edu, 770-846-7960)

b. Creative Startups Accelerator Impact Report (Alice Loy, Director, Creative Startups, alice@creativestartups.org)

c. Midtown Public Engagement Update (Daniel Hernandez, Project Director at Proyecto LLC, daniel@proyecto.is, 917-930-0106; and Rich Brown, Director, Community & Economic Development Department, rdbrown@santafenm.gov)

9. **PUBLIC COMMENT**

10. **MATTERS FROM STAFF**

11. **MATTERS FROM THE COMMITTEE**

12. **MATTERS FROM THE CHAIR**

13. **NEXT MEETING: Wednesday, September 8, 2021**

14. **ADJOURN**

Persons with disabilities in need of accommodations, contact the City Clerk's office at 955-6521, five (5) working days prior to meeting date.

ANDERSON SCHOOL
OF MANAGEMENT

City of Santa Fe & UNM
City Innovates Inaugural Challenge

Summary Report

Prepared by:
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Myrriah Tomar, and Wellington Spetic

July 2021

Introduction

During the Spring semester 2021, the City of Santa Fe and the University of New Mexico were awarded a small collaborative grant to address an issue of economic and social impact for Santa Fe region. The grant was provided by City Innovate + STIR Labs, a National Science Foundation initiative to transform cities through dialogue and shared training between city governments and academic institutions. The grant provided for small seed grants to support the collaboration plus staff support, facilitated trainings and related resources from STIR Labs and City Innovate to develop innovative and impactful ideas based on our initial proposals. As part of our successful bid, we proposed addressing several key questions of common interest:

- What are the institutional signals that disconnect the tech community from other communities?
- What factors disconnect youth from the local tech ecosystem?

During our facilitated training sessions with the City Innovate and STIR Labs experts, we realized that the initial questions, although very important, carried a great deal of divergent meanings across stakeholders, including the way that the word "technology" was defined and mobilized within current economic development dialogues. For this reason, we decided to focus our collaborative resources toward building out a conceptual framework that could contain and refocus the divergent ways that technology operates as an economic and social driver within the state. To achieve this, we gathered a group of community leaders from a broad economic and cultural spectrum to identify a cultural and historical context for our primary objective: To understand the role technology plays in shaping cultural views about jobs and economic growth in the tech sector for the City of Santa Fe and its area of influence within the state. The goal was to develop a perspective with greater opportunities to effectively strategize the attraction and retainment of talent in New Mexico and to strengthen the economic and social health of the diverse communities that constitute our state. These dialogues were organized as *technoscapes*, a term used by cultural geographers to describe the landscape wherein technology generates a specific influence and impact (Appadurai, 2006). The technoscape framework served to broaden our dialogues in order to think beyond the assumptions around what constituted technology and the tech sector.

Methodology

Over a period of 16 weeks, we administered a form of preliminary research referred to as design-based participatory dialogue. This participatory, community-based research method is often utilized as a means to uncover assumptions or root elements of a complex social problem. This research is both an end in itself while also serving as a means to develop a future research agenda.

Popularized in the early 2000s, design-based participatory dialogue can be attributed to the work of Raymond Williams' framework for building a culturally-intelligent vocabulary to account for the disjuncture between rural and urban people (1970s).

This is consistent with a renewed interest in preliminary dialogue as a mode to build social cohesion in cities and other multi-cultural structures (Fonseca, et. al 2019). More experimental methods are recommended by scholars of social cohesion to address the disjuncture that consistently prevents sustainable knowledge transfer, specifically targeting culturally contested terms that force social initiatives to reset themselves. In the context of technology, the field of cultural geography mapped out the concept of the technoscape to explore the intersection of social, political, and economic forces to explain the production of cultural values over time within a given place. Effectively, this project sought to understand the technoscape of the Santa Fe and Northern New Mexico to address the following questions:

R1. What has been the explicit and implicit messaging/signals, both historical and current, from the tech industry to the residents of New Mexico, specifically the City of Santa Fe?

R2. What has been the impact of that messaging on central/northern NM communities?

To achieve this, we conducted a series of six weekly discussions, with a total of 17 experts, framed by the following key elements:

1. Identify an historical period as defined by a specific technology or set of technologies and to discuss significant aspects of the period.

2. Collect an inventory of keywords from the invited experts and team members with questions such as: Why do these keywords play a role in how we see technology? What cultural habits were shaped by the technology in question?

Table 1. Template for dialogues.

Session #	Technology/ Technoscape	Historical Period (technology that defined that historical period)	Message that was sent/who sent that message/signal (Structure of Feeling)	Associated Keywords /contested concepts	Sources of evidence of this messaging was embedded in community views	Guest Speaker who attended and their recommendation
Examples:	Nuclear Technology	Founding of LANL in 1943, post Manhattan project	Outsiders have the expertise and locals are here to serve that expertise	Progress, modernity, indigeneity, etc., sacrifice zone	Legal documents, policies.	Historian, other scholar, community leader, tech entrepreneur

The curated dialogues were recorded and analyzed to produce:

1. A glossary of culturally-intelligent terms with explanations for why these words matter

2. A set of recommendations for any data innovations that can take place (i.e., taking the "disconnected youth" category and developing new ways to think about that phrase)

3. Other recommendations/implications for further research

The Dialogues

The discussion, scripts, participants, and technoscapes were developed during our weekly team meetings. In order to encourage candor and more open dialogue, summaries of the dialogues did not identify the participants and their perspectives by name. Community leaders were guided by the following prompts (see also Table 1).

Key Historical Moments

> *Let's begin by identifying the key historical moments that influenced New Mexico's relationship to technology. We will begin with a set of moments that our team has initially identified and then through a short conversation, explore whether we think any should be added.*
>
> *If time permits, let's try to rank these historical moments in terms of what we think their perceived importance is to New Mexico. Let's try to rank them in terms of how we perceived their importance as an economic driver. If possible, let's then rank them in terms of their cultural influence.*

The Messaging

> *Now that we've identified some key historical moments, let's go around and talk about messaging.*
>
> *In other words, when these technologies were introduced, how do you think people received these technologies?*
>
> *Did people embrace the technology? Was it seen as an opportunity or as a threat?*
>
> *What was the perceived message or sentiment that people felt about the introduction of these technologies?*

The Keywords

Now that we've reflected on this technology a little further, let's try to identify some words that trigger a strong response to these technologies. Let's go around the room an identify a word or phrase that you think has meaning because there was a strong emotional or political response. Pick one word and briefly explain why you think that word triggers a strong emotional response.

If time permits, let's try to rank these "keywords" in terms of the level of response they trigger. Which have the most negative responses? Which have the most positive? If time permits we'll do both rankings.

The Source Material

We would like this to be the start of more research and work to explore these vital relationships. Part of that will require that we search for materials or evidence to confirm what our discussion has produced. This could be anything from public speeches from leaders to marketing materials sent from key stakeholders. Let's go around and brainstorm a specific source of information that would help us explore our considerations further.

The Five Technoscapes

Biological and Laboratory Technology: the relationship between the establishment of the national labs in New Mexico and the introduction of other research facilities and their influence and impact on New Mexico communities.

Agricultural and Land-based Technology: The development of agricultural systems in New Mexico and how they shaped cultural and social values. These technologies are more ancestral and heritage-based and may have played a greater role in the reception of other forms of technology.

Infrastructural Technology: The development of these technologies and their influence on NM communities, including the development of border infrastructure, the influence of the railroads, the federal highway system, and the formation of the Camino Real.

Software and Computing Technology: Some of the latest advancements in computer and software technology were partially developed in New Mexico. This session discusses key developments in computer and software technology and how this has shaped our perception of New Mexico and local growth.

Takeaways, Moving Forward, and Next Steps

In order to represent the community dialogues in the context of the broader discussions happening within the Santa Fe region, Temme Meil, a media and social research organization that specializes in public discourse and its relationship to social impact within

communities, were contracted for a deep analysis. They aggregated the notes taken during the community dialogues and placed them in conversation with perspectives on similar topics across a spectrum of news and media outlets. The aggregated results and findings can be found in the attached report (Appendix A). Based on the interpretation of the analysis, key takeaways were identified.

Takeaway 1:

Data of a different kind is needed to direct the future decision-making process in the Santa Fe region regarding the development of the tech sector. More innovative ways of shaping that data as well as community engagement is needed. The technoscape dialogues demonstrated a significant divergence in how people perceive New Mexico as a landscape for growth and development. Conventional economic and social data points to guide decisions would not result in the desired result of an engaged tech ecosystem.

As leaders and decision-makers strategize for effective next steps for growth, acknowledging that the terms of growth and development operate within a complex landscape that contain multiple lived realities requires data that reflects this level of complexity. By integrating cultural and social values related to economic growth and progress, the distinct opportunities that New Mexico offers can be harvested for a truly innovate entrepreneurial ecosystem.

Existing data is constantly being improved and updated and now needs to be placed in the conversation. The New Mexico Association of Commerce and Competitive Industry published a large survey in September 2020 that indicated key factors for the recruitment and retainment of human talent within the state[1]. Concurrently, in June 2020, STEM Boomerang, LLC in coordination with the Albuquerque Community Foundation published a talent recruitment and retention study that addressed several of the key issues that prompted this project to move forward[2]. These represent several key studies that have set a stage for the application of new critical frameworks. It would be interesting, for example, to see how these and other economic reports would operate when placed in each of the technoscape landscapes. Would these data points yield different strategies when the landscape itself was seen from a different lens? If so, what would that tell us about how to create economic strategies that can contain those complexities?

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[1] See https://www.nmchamber.org/wp-content/uploads/2020/12/Driving-New-Mexicos-Future-2020-Final.pdf

[2] See https://stemboomerang.org/stem-talent-recruitment-and-retention-study/

Takeaway 2:

New Mexico is neither an empty space nor a completed narrative. A point of emphasis from the previous takeaway is that community-driven knowledge is located in a different terrain than information and knowledge that comes from "outsiders". The complex underbelly of New Mexico's history and the tensions it contains has a direct effect on how people choose to stay or leave. As information is developed to inform decisions for shared economic prosperity, decision makers should build upon and innovate within the orthodoxy wherein data is defined and disseminated. We noted in several of our dialogues that highly algorithmic or mathematical data was segregated from anecdotal information, and the validity of information was dependent largely on assumptions made about data. A good example of this is how anecdotal information is not seen as reliable. While anecdotal information is not a reliable decision-making tool, it may hint towards larger structural sentiments that cannot be ignored. As one participant noted in our dialogues, "anecdotal information can quickly become oral history". There has to be a way for future studies to appreciate both without presupposing one over the other as a means to address a problem. Depending on the technology that mediates the landscape, the use of data and the way it is valued differs greatly.

Takeaway 3:

The technoscapes are salient and valuable. There are clear differences in how technology influences people depending on the type of technology. Often, the "tech sector" is something that sees itself as its own immutable group of people. One of the primary findings of this exploratory research is that technology is interwoven in all aspects of life and society and the claiming of "tech" as a thing separate from those parts of life and society reinforces barriers between communities. We believe this is a foundational part of how to rethink the intersection of community, technology, and economic development – to find and acknowledge technology in all aspects of life and to encourage learning from each other how this carves a different path for New Mexico.

Technologies tend to get associated very quickly with specific groups of people. Instead of focusing on the tools that are available to people to improve lives and or enhance the availability of opportunities for prosperity, technologies tend to focus on the people or personalities that employed a specific iteration of those tools. With great frequency, the terms economic development tended to be more about the humans who used the tools (and the prosperity they achieved) rather than what the tools were able to achieve or how those tools have an influence on culture and society. For this reason, there may be room to explore ways to recharacterize the way that technologies are introduced to communities, allowing for a more "neutral space" wherein technologies are able to manifest as a place for growth and shared prosperity. Otherwise, the question of "who

benefits" dominates the discussion and mobilizes existing notions of inequality, progress, and human advancement.

Being able to navigate the cultural and historical context of a place is valuable in and of itself. However, several key measures can be developed once that context is appreciated. First, the recruitment of youth can be developed more as a value-based approach model. Instead of talking about high-paying jobs, one must also focus on qualitative elements of life/work that resonate with people. Those metrics are currently available, but can be improved to answer with more depth how a technological venture answers the essential question: "who benefits", but also describes more qualitatively "how one benefits". Community and social impact metrics can also include how one is responding to major sensitives to issues that make people feel excluded.

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Appendix A

UNM - City Challenge + STIR Lab*

Contents:

Implicit Keyword Insights

Explicit Keyword Insights

Metaphors Insights

New Mexico Tech's Mindscapes

Social Media Insights

Key Takeaways & Insights

***** *Analyses provided by Temme Meil under the guidance and supervision of the UNM research team.*

IMPLICIT KEYWORDS: INSIGHTS

- Colonization is both the past and current reality for the state, and the perceptions of tech from the public are influenced by colonizationist impressions
  - Gentrification, as a current reality with effects on communities, is seemingly perpetuated by incoming tech and the development of existing tech
  - Colonization practices, or perceived colonization practices, can overshadow the traditional techs that this area was built on, acequia culture and water preservation being one such example

- Water – both in metaphorical conceptualization of tech and in actual preservation terms – affects tech perceptions and should affect implementation
  - When new resorts/techs/agencies come in, there may be tradition preservation attempts by locals as well as a mindset of resource scarcity (and a resultant "cold shoulder") in order to limit resource drain and history erasure
  - The "cold shoulder" effect is felt by the tech community(ies), but the why behind it is fuzzy for them implementationally and integrationally

- There is an abundance of implied agency without specificity of who or what the agent is
  - The terms "development/develop, building/build, spawning/spawn, owning, privatizing/privatization, transforming, including/excluding," etc. all imply that someone or something is doing those things (i.e. someone or something is privatizing things, someone is developing the tech systems, something is spawning an emerging tech community, etc.), however locals aren't sure who is responsible for them (CEOs, companies, recruiters, lab employees, etc.)
  - The secrecy and security measures inflate this issue, and locals aren't sure whether there is room or invitation for their participation and/or voice

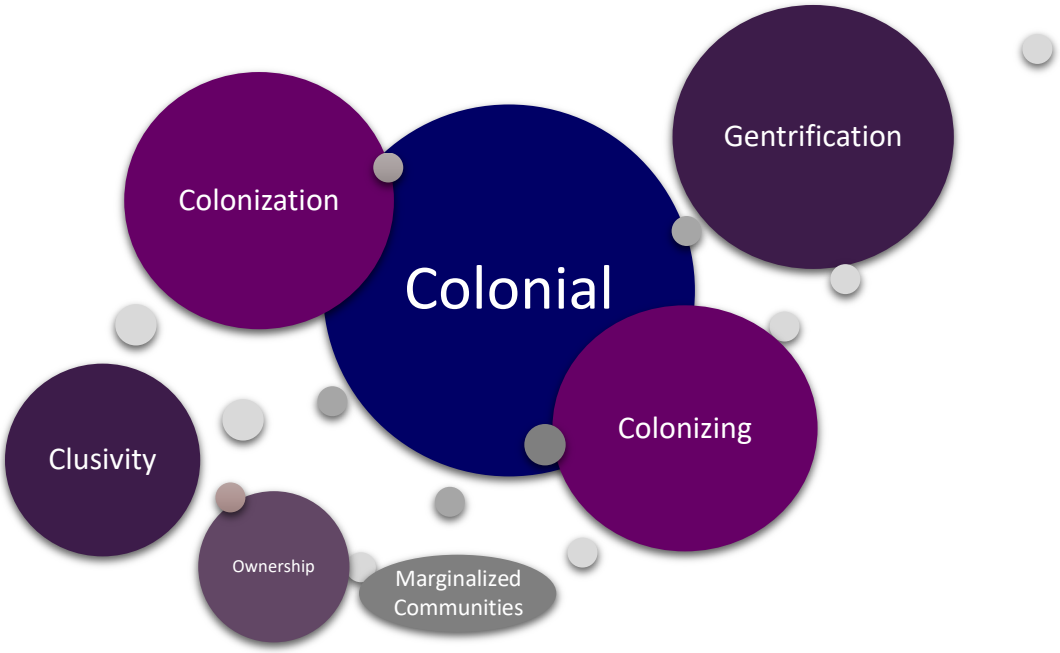
- There is a mismatch and gap between what locals want to know and what people from tech companies explain and disclose to the community
  - There may be a perception from inside the labs, for example, that they cannot explain to locals what goes on in the lab because of both security and necessary secrecy, but also because of a lack of education in the community (i.e. the locals wouldn't understand)
  - However, many locals work in the labs in some capacity and therefore may be able to glean at least a baseline understanding of the labs' work, having a basic understanding of the systems
  - Additionally, because the community has many employees in the labs, whether high-level or low-level, there are many secondary, tertiary, etc. connections to employees of the labs/agencies, which could act as a way to conduct community outreach and education

- There are many gaps in accessibility of tangible techs
  - For example, broadband, cellphones, air space, etc. are all contentious tech issues: Colonization of air waves, inaccessibility to broadband for certain communities and rural areas, and financial barriers to tech possession all create gaps in accessibility and

therefore understanding

- NM's traditions, history, and identity(ies) play a large role in the complexity of the way tech is accommodated, assimilated, and or dismissed; therefore, each tech field has a unique relationship with both the public and those working in that specific category of tech
  - There is a timeline point of view gap between the state's traditions and tech's trajectory: The state has historical pride, and tech has future progressions in mind
    - Even when comparing histories, the state's identity is rooted in colonization events, cultural awareness, and water rights; tech's history is rooted in defense, national/governmental pushes toward progress, and wartime necessities
  - There is a gap between the complex, artistic history of the state and the comparisons to San Francisco and the Silicon Valley
    - Silicon Valley is a large force, housing half the world's billionaires, and it is known throughout the world; New Mexico's tech is questioned by locals as to what it's doing for the local communities and for the surrounding environment: There is a mismatch between global and local mindsets between the two, rendering the comparisons "apples to oranges"-esque

- Marginalized communities can be further marginalized by incoming tech



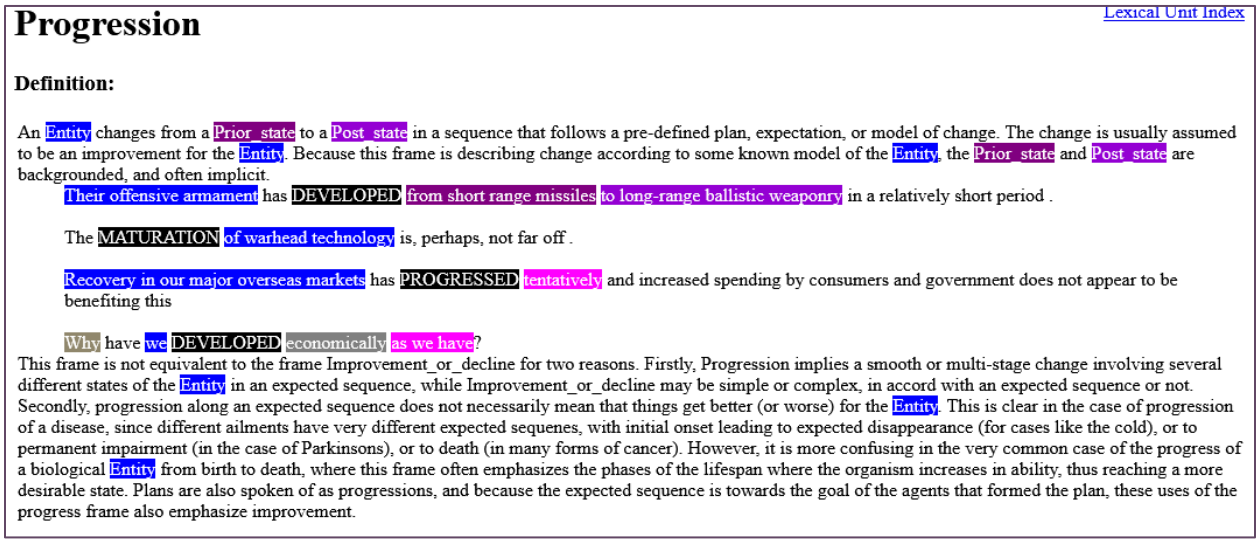
*Clusivity is the collective noun for inclusive and exclusive

EXPLICIT KEYWORDS: INSIGHTS

- "Innovation" is a salient term when it comes to discussing tech
  - Whether innovation is the aspiration/goal of local tech, or whether the current general mindset is that local tech is already innovative might be included in future research

- Participants brought up "digital inclusion" and "digital equity" explicitly
  - The colonialism history here has the potential to infuse into the digital realm, and these keywords indicate a desire to ensure inclusivity in order to transcend those patterns

- "Progress" was brought up more than once in more than one context:
  - In the context of modernization (progress and modernity)
  - In the context of linear advancement (evolution needs to be continued forward to not inhibit progress)
  - In the context of movement (progress away from something but also toward something),
  - In the context of the economy (tech and economic progress)
  - In the context of being an effect of relationships formed in the state's past (x relationship helped progress and modernities come about)
    - The AgTech participants noted acequias are made to feel like they're standing in the way of progress for the sake of protecting their communities
    - When the term "progress" is entered into FrameNet, it is noted merely that there is a change from an entity's original state to its new state, but that the changes do not always implicate improvement or benefit:
      "progression along an expected sequence does not necessarily mean that things get better (or worse) for the Entity. This is clear in the case of progression of a disease, since different ailments have very different expected sequences, with initial onset leading to expected disappearance (for cases like the cold), or to permanent impairment (in the case of Parkinson's), or to death (in many forms of cancer)" (Frame Index, Progression (n.), https://framenet2.icsi.berkeley.edu/fnReports/data/frameIndex.xml?frame=Progression)



Progression

Lexical Unit Index

Definition:

An Entity changes from a Prior_state to a Post_state in a sequence that follows a pre-defined plan, expectation, or model of change. The change is usually assumed to be an improvement for the Entity. Because this frame is describing change according to some known model of the Entity, the Prior_state and Post_state are backgrounded, and often implicit.

Their offensive armament has DEVELOPED from short range missiles to long-range ballistic weaponry in a relatively short period .

The MATURATION of warhead technology is, perhaps, not far off .

Recovery in our major overseas markets has PROGRESSED tentatively and increased spending by consumers and government does not appear to be benefiting this

Why have we DEVELOPED economically as we have?

This frame is not equivalent to the frame Improvement_or_decline for two reasons. Firstly, Progression implies a smooth or multi-stage change involving several different states of the Entity in an expected sequence, while Improvement_or_decline may be simple or complex, in accord with an expected sequence or not. Secondly, progression along an expected sequence does not necessarily mean that things get better (or worse) for the Entity. This is clear in the case of progression of a disease, since different ailments have very different expected sequenes, with initial onset leading to expected disappearance (for cases like the cold), or to permanent impairment (in the case of Parkinsons), or to death (in many forms of cancer). However, it is more confusing in the very common case of the progress of a biological Entity from birth to death, where this frame often emphasizes the phases of the lifespan where the organism increases in ability, thus reaching a more desirable state. Plans are also spoken of as progressions, and because the expected sequence is towards the goal of the agents that formed the plan, these uses of the progress frame also emphasize improvement.

- As such, implications of the equation “progress=good” is subjective on the part of speakers and listeners, and future research might determine whether certain demographics see progress as beneficial, detrimental, or neutral; further, research could analyze potential differentials between the verb and the noun forms of the term

- There is a certain deteriorative sub-conversation happening when you talk about the local tech community(ies)
  - With a history saturated in war-time efforts, experimental bombs and resultant environmental injuries, and secrecy, the current discourse – both in the awareness of those who work in tech and from the perceived perceptions of the local communities – can be subtly infused with pernicious language
    - Examples: “bomb,” “cancer,” “contamination,” “radiation,” “risky,” “suspicious”

- Cognitively, many explicit keywords indicate a stronghold perception of the local tech
  - Examples: “exclusive,” “fortress,” “inaccessible,” “insulated,” “privacy,” “security,” “siloed,” “systems-level walls”
    - Interestingly, keywords such as “silo” and “fortress” indicate war-time functions, which parallels the history of much of the New Mexico tech industry
    - Again, referencing FrameNet:
      - The term silo employs the frame elements of missile activity (“an underground chamber in which a guided missile is kept ready for firing” and whose usage element is part of the term’s core)
      - The term fortress entails frame elements of protection (“This frame contains words which name permanent fixed structures forming an enclosure and providing protection from the elements”)
      - Future research might delve into whether these potential connotations hold true and for which demographics (e.g. whether employees use the term fortress and the resultant connotation of protection, while surrounding community members employ the silo – war, weaponry – connotations)
    - There is friction between the security functions of the tech, especially the labs, and the insecurity provoked within the community due to security-fueled secrecy
    - These terms are key to understanding emotive responses from locals about the function of tech, tech’s place in New Mexico’s communities, and the perceived detrimental potentialities of current and future tech placements in the state

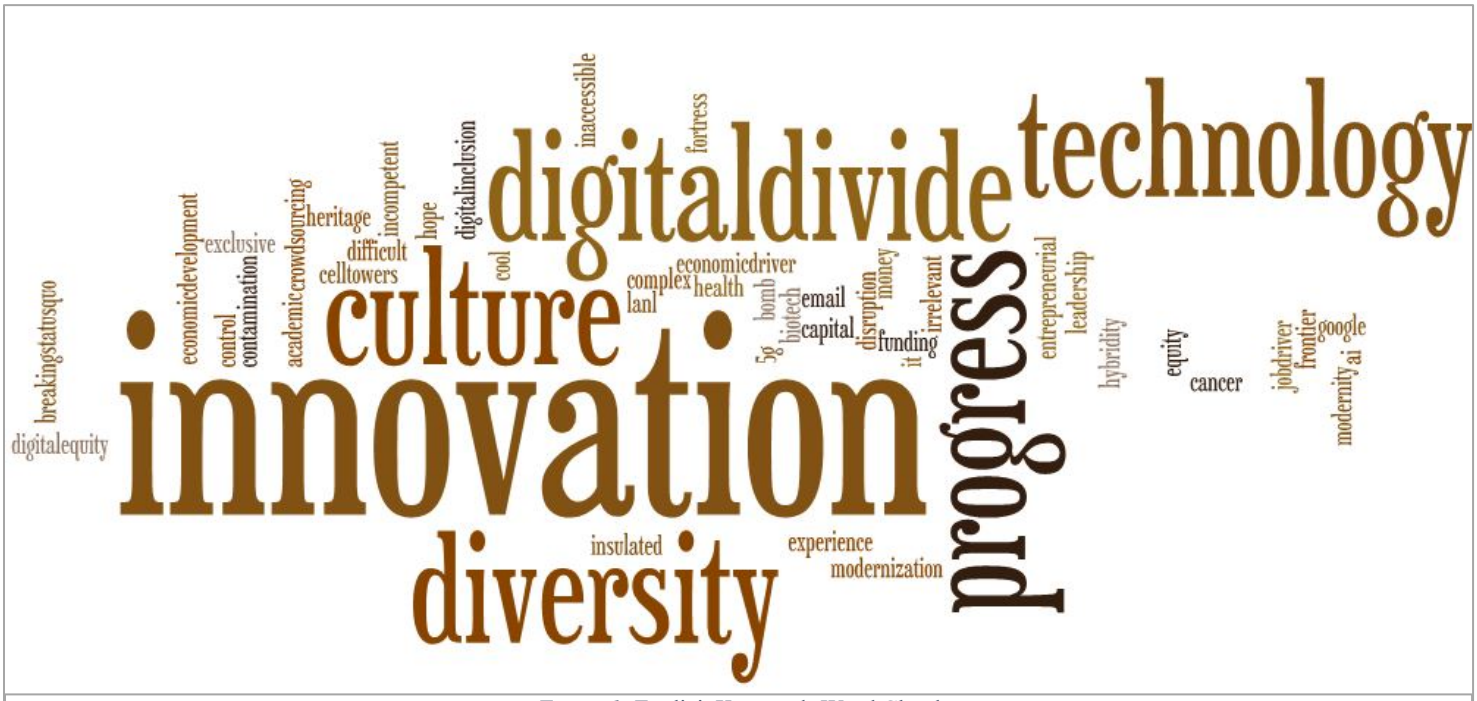


Figure 1: Explicit Keywords Word Cloud

METAPHORS: INSIGHTS

Metaphor Type	Instances
Spatial Tech	"Intel looms large in people's minds" "The elephant in the room is the labs"
Locative Tech	"in website" "lounge" (as in a virtual lounge) "virtual place to visit" "you're in a world that's generated"
Tech & Implicit Forces & Directionality	"path of technology" "it marked an era of acequias to see themselves differently and that the world was moving in a different direction" [than acequias] "Technology is something that takes you away from traditional"
Timelineliness	"In the 1970s national priorities started to change […] laboratories are a reflection of national priorities" "mental time maps" "New Mexico is proud of its history" "these are the new priorities of the 70s" "WWII was a different animal" "the priorities of WWII are very different than the priorities of 1970s"
Gaps	"behind the fence" "what we're doing gets lost in those other words" (distrust, propaganda, etc.) "It's part of that wall, not really set up for the goals the public goals." [personal connection is the] "way to break down some of the silos" "infrastructure in NM was so shallow – in part shallow because of siloing" "you're not going to make LANL soft and fuzzy" "there's that gap between what's happening and what the perception or the engagement is" "distance" "we had to hunt"[for interest in the labs]
Effects	"ripple effect on wages" "ripple effect on trailing spouses" "people were exposed to a lot of different ideas and brought that home with them" "outside forces coming in and creating [culture]" "ripple effect in communities and small businesses is just huge"

- Spatial:
  - The examples above indicate that tech has an ability to take up a significant amount of room in people's minds and conversations.
  - TAKEAWAY: The idea of tech is large, which could potentially lead to feelings of tech being a daunting force to local communities. This could explain some of the avoidant behavior of local communities when discussing tech or becoming more involved in the tech economy. Conceptually, tech could seemingly be too big to discuss or penetrate or understand.

- Locative:
  - Tech and virtual and digital arenas are quickly becoming more 3D to consumers – they are places consumers can now go to in order to experience something. Now, events, learning, and adventures can take place within tech's "walls." This speaks to the above

metaphor of tech taking up space, conceptually, but also to tech being locations that require accessibility routes to those spaces.
    - TAKEAWAY: Tech is taking up space in more tangible terms now, and, to touch on what some of the keywords brought to light, this necessitates more know-how on accessibility and clusivity.

- Tech/Forces/Directionality:
    - Tech has an inanimate, intangible, seemingly unstoppable force behind it, allowing it to have a direction, move in the world, and take people places. The agency of the action – as in, who/what behind the tech is making the movement possible – is unclear.
    - TAKEAWAY: Tech has a linear progression, both forward progressions and backward history, as well as the ability to take people out of their everyday. To alleviate community concerns about new tech in the state, it may be pertinent to investigate how the trajectory of tech could be communicated to them and personalized to the state's needs. Additionally, addressing the agency(ies) of the movement of tech may be helpful for cultivating community conversation (i.e. are the labs, the government, specific companies, etc. responsible for helping create trajectories or movements in tech).

- Timelineliness:
    - There is a perceptual effect on tech passed down from the war-time priorities during WWII and the decades thereafter. Moreover, the history of the state itself is in conflict with the history of the labs and local tech: Tech relied on war-time weaponry development, and there was a resultant effect on the environment, while New Mexico's history is rooted in tradition, environmental respect, and the perpetual fight for equity and decolonization.
    - TAKEAWAY: There will need to be a bridge to unite the ideals of the state's identity and the (perceived) identity of the tech community. Tech connotes the perpetuation of colonization practices, and the state's identity connotes the fight against those practices; they are in direct conflict with each other.

- Gaps:
    - There is a literal divide in people's minds between tech and the local communities. There seems to be a perception that you cannot go around the divide, climb the divide, or exit the divide. The terms used within these metaphors are strong.
    - TAKEAWAY: There is a strong blockade preventing the parties from being able to see each other, which creates major dichotomies in the discourse about tech in New Mexico. Words like "wall," "silo," "fence," are all strong, construction-based conceptualizations of a blockade between the local community and the tech community (versus softer terms like partition, separation, or barrier, which could have been employed but that are softer, less tangible words). As such, it's important to note that the dichotomy between the two communities is strong and will need strong tools to break down.

- Effects:
    - The effects tech has on communities are secondary, tertiary, etc. They affect employees, employees' families, the people around the companies, etc. Moreover, tech is once again described as a force that, for better or worse, influences the state's culture.

- TAKEAWAY: Tech is seen as an unstoppable force, and, for a state so rooted in its traditions and history, that force could make locals feel out of control due to ripple effects, cultural effects, and intellectual effects. Future research might distinguish locals' perceptions of how wide-reaching tech's effects are here in the state. Additionally, the influence of tech on the state's culture is important to note, as the state is rooted in its culture and will not let go of that easily.

NEW MEXICO'S MINDSCAPES: THE TECH SECTOR

"Technology is not going to save us. Our computers, our tools, our machines are not enough. We have to rely on our intuition, our true being."
"All cultures […] have grown out of myths. They are founded on myths. What these myths have given has been inspiration for aspiration. The economic interpretation of history is for the birds. Economics is itself a function of aspiration. It's what people aspire to that creates the field in which economics works."
-Joseph Campbell

The mindsets of the tech sector and the New Mexican communities are multidirectional and dynamic paradigms that involve individual priorities, community priorities, and national priorities. Foundationally, there are embedded mythologies, psychologies, and physiologies of multiple communities. There are still disputes over land, water, and, more recently, air rights, as well as assimilation and/or colonization practices. New Mexico has a unique perspective that creates a multifaceted paradigm, which requires an objective interpretation of various subjective experiences.

An example of a directional paradigm was conceptualized by one of the interviewees:

"The myth of Santa Fe, Anglos made it. It's a valuation of the state's tradition as an alternative to the progress and moderna [modernity] that people had doubts about."

It was also noted:
"(New Mexico is) another kind of America that sidestepped what many people began to be concerned about with the track that we, as a whole, were on," and "It was an alternative, an integrated, harmonious, alternative, annihilation of the Native cultures did not occur to an end," there is "a kind of a hopefulness that just went on into the 30s," "New deal influences created markets for traditional crafts, which were integrated, in terms of art."

These quotes illustrate how New Mexico has a unique relationship to colonization, time, space, and place. This is being further evolved, in real time, as the federal government tries to address categories of concern like climate change, while in the process of expanding nuclear testing facilities around Santa Fe, beyond LANL's current location, while activist groups, such as Veterans for Peace, speak out in protest ("Big Development on the Nuclear Horizon," T.S. Last, Journal North, May 26, 2021).

The land and water are shared by everyone and rely on people cooperating based on mutual interest, respect, and understanding that each party can benefit to a level of adequacy if everyone's continued survival is prioritized. Worth noting is Dr. Alan Watkin's[3] research and Dr. David Schnarch's[4] research, which have highlighted that emotion is electricity in motion and minds are hardwired to sustain emotional survival at all costs. This is relevant to the narrative of New Mexico's tech sector, given that everything an individual says – including those in the sector – is based on personal survival. This personal survival is dependent on the tech sector's ability to sustain itself and on collective survival, which is dependent on the ability to sustain the environment. Hence, why, when emotionally charged words such as "nuke" or "bomb," were

[3] "Why You Feel What You Feel," Dec. 18, 2015, Retrieved from YouTube: https://www.youtube.com/watch?v=h-rRgpPbR5w
[4] "At Home with David Schnarch," May 20, 2020, Retrieved from YouTube: https://www.youtube.com/watch?v=HZF_ZJaLABE

discussed, it wasn't necessarily emotional for those in the tech sector: They are desensitized to the words, as they have become a part of their everyday vernacular. This split and disconnection is important to track over time, especially when reflecting on key moments in history and how they have a ripple effect into today's decision-making and conceptualization of the reality in New Mexicans' minds across categorical divides.

Furthermore, Dr. Schnarch's work has focused on what he calls emotional mind-mapping and mind-masking, which displays how emotional survival is navigated when communicating interpersonally. Essentially, he says, when people feel safe enough, they provide a map of their minds. The more they feel disgusted, and feel less than safe, the more minds are masked. When threats to resources occur, mind-masking may increase and mind-mapping may decrease, hence the increases in conflict and lack of adequate resolution across categorical divides and interest groups who have diverging priorities. Metaphors help define and display personal and collective intuitions, which help make greater sense of individual and collective mind-maps.

A useful metaphor that comes to mind, especially when considering the effects Acequias have had on the macro-culture of New Mexico is: Watering hole. This metaphor is helpful because it provides a frame and illustration for how New Mexico operates, as it conceptualizes natural resources alongside workforce solution concerns. This metaphor is relevant not only because it can bring conflicting minds together at a common source, but because, in the interviews, there were many utilizations of water metaphors that illustrate that water is already used to conceptualize relationships and communication dynamics in the state. Worth noting as well is, water symbolizes the unconscious[5]. As a result, water metaphors were a synchronizing force that were noted throughout the conversations. Terms like "stream," "watersheds," "faucet," "mainstream," "tip of the iceberg," etc. were noted throughout the conversations, indicating an underlying synchronicity in the field of tech.

As Gregg Levoy noted, "Synchronicities mirror deep psychological processes, carry messages the way dreams do, and take on meaning and provide guidance to the degree they correspond to emotional states and inner experiences."[6] Synchronized think indicates a link between entities as they are syncing up with one another whether knowingly or unknowingly.

Capitalism is not, and likely will not be, prioritized as much in New Mexico as it is on the coasts. This is, in a way, still the wild west. Small wins and accomplishments are celebrated more often than larger movements because there's an underlying current of scarcity that reminds locals of resources and the need to conserve, which entails less of a need for capitalistic/competitive dominance in the pursuit of survival. Hence, several interviewees comparing Santa Fe's tech scene to Silicon Valley or the east and west coasts, and noting how "different" it is here, while referencing Santa Fe's nicknames like "Fanta Se." These are indications that there is a level of unreachability and unattainability when trying to attain Silicon Valley-level success. Such attempts "hasn't worked in the past."

There is a general consensus that hubs and Silicon Valley-esque scenes are, on average, something that can never "take off" in Santa Fe and beyond, as they have in other states, given the

[5] Jung, C., "Archetypes of the Collective Unconscious," 1959.
[6] "Synchronicities: A Sure Sign You're on the Right Path," Dec. 19, 2017, Retrieved from: https://www.psychologytoday.com/us/blog/passion/201712/synchronicities-sure-sign-youre-the-right-path

local economy, priorities, and systemic concerns. Not to mention, the labs' influence and "bureaucracy headaches" that have to be dealt with and are seen as an annoyance by those who want to accelerate their companies' growth without having to deal with "headaches and overregulations."

Still though, there is always a desire for something like the valley in some individuals, and if that desire is not satisfied, they leave for jobs elsewhere for a variety of reasons, some of which are disclosed openly, others of which are masked. This is normal, if how groups communicate displeasure and how many individuals need reassurance and outside validation that what they are doing is valuable is taken into consideration. If they cannot get validation in whatever group they're in now, they will leave and go elsewhere to get what they need to keep going for the American dream, so to speak. Again, aspiration is a consequence of inspiration, and economics is a function of aspiration. It is important to note why individuals leave so as to not play into incorrective myths about brain drain that exclude those who stay, and have been, here.

Here are some examples of comments made by an individual who had moved out of state after developing several technology companies here:
"Just don't have a lot of wins. Pumped up the small successes too much, too quickly."
"Big fish, little pond."
"As an outsider, I needed a lot of mentorship, had to look outside the state. Same with capital (money raising and lending)."
"Not a lot of big wins; can't see the real issues if we keep celebrating the small wins too much."
"Latent progressive contributors that don't have a platform."
"There are cheerleaders out there, if you look for it."
"Push Backs, not a lot of great examples coming out of Los Alamos. Silicon Valley has better examples versus labs being obnoxious with technology license problems, 90% of the value is in their brains, not in the code, but that's not how they saw it. I kept going for capital outside of the state, which could help us raise money for future rounds, I got $0 from New Mexico. So, I think it's this combination of Los Alamos being confused, people having been burned on a lot of different Los Alamos startups or Sandia startups, and the capital, and probably just me as an outsider coming in. I think that hurt us. Now, keep in mind that evaporated after about a year. Like after a year, Los Alamos loved us."

On the other hand, here are some comments by individuals from the labs:
"90s-2000s is when [the public companies] had their own boom bust; no boom and bust for us, though there is a lot of discussion about what Silicon Valley makes versus what a programmer at the lab makes."
"If you were out in the startup world, maybe it would be different."
"Why would you leave the security, and the pension, and the comfortable job here to go do [all that hard work] out there?"

When it comes to the land and the culture in New Mexico, respect is a big deal, in many ways because of the requirement that locals interject for the needs of the land and native communities. The interviews highlighted two categories of tech: One in touch with the land and needs of native New Mexicans and indigenous communities, and one out of touch with them. Further, agriculture technology conceptualized their place and relevance in the discussion in a grounded, less

capitalistic, tradition-and-community-oriented attitude. When the orientation within the Acequia groups is considered, there is a Physiological → Psychological → Mythological mindset that prioritizes sustainability, stability, and survival of the collective, which helps elucidate the narrative of the mindset of the state:
"Acequias are more adaptive and aren't in a rigid framework of private property, it's more in situ, based on empirical knowledge and traditional knowledge."
"What really has value in the context of being able to produce food in the desert."
"People leave for a lot of different reasons […] How do you stay a part of the rituals?"
"Appreciate what the generations before us were able to do […] that needs to be lifted up and affirmed."

There is a perception that marginalized communities and locals don't have the necessary understanding to interpret the purpose of the tech sector, as well as the state and national priorities for the tech sector. The tech forces are dropped in locals' laps instead of being created from the ground up: "Something parachute's in, lands, and appears, there, as opposed to being build there from the land up; the contrasting ways that culture is built; outside forces coming in and creating it, as opposed to people that live here, growing it, from the inside out." This exasperates the trust and security issues.

Those in tech talk about the future of tech, the history of tech, the opportunities from tech while seemingly washing out the history of the relationship between the New Mexican people and technology. Then, there are locals who are fearful because of the uncertainty of how tech will affect their life and land. At the same time, individuals are forced to try to predict what will not affect them, so they can focus on what they need to in order to ensure survival. This delicate dance cultivates tension and dissonance about the tech arena. This puts the onus of survival, surrounding the uncertain effects of tech companies, onto the locals, which may foster feelings of resentment and increase divides.

Worth noting is how the desert climate is immersive and demands attention. The climate does not allow disassociation for long before a survival mechanism kicks in to remind the body to drink some water or rest. Since the tech sector is built on a "create, distribute, scale, compete, repeat" attitude, rather than New Mexico's "sustainable, conserve, immerse, and distribute for collective survival" attitude, there's naturally going to be a degree of friction and dissonance with certain groups, depending to what extent they've assimilated and accommodated the New Mexico mindset.

The degrees of freedom and error are slimmer than they have ever been, but the collective involvement, landscape-oriented mindsets, and tradition and history appreciation of the local people is present in their communications intuitively, hence the foresight they had when integrating the Acequias culture into the tech realm. When outsiders come here and have not done research on such developments and histories, it makes it more difficult for local communities to initiate them – they want to prevent the loss of tradition.

When interpreting the insider (native New Mexican) arguments versus the outsider (transplants) arguments about integration practices, there is usually a divergence. Outsiders bring in their own ways of doing things, thinking they will be able to duplicate what's worked elsewhere (e.g. Silicon

Valley), but there are ideas and mechanisms native New Mexicans use to ensure "culturally appropriate" behavior.

The cognitive process of accommodation before assimilation needs to be understood:
"You have got to accept what the unconscious produces, and you have to understand its language. It is Nature, and it has to be translated into human forms." -Carl Jung

With the added layers of secrecy required given the sensitivity of certain projects at the labs, there is a distrust paradigm that locals are forced into, which produces a self-defined definition of what tech is, isn't, and should be. This often contradicts the mindset of those working in the labs, the actual projects that are occurring, and the necessary security precaution of secrecy:
"You can do transparency, but there are things that have to be secure/secret."
"You're not going to make LANL soft and fuzzy."
"(It's the) fortress that's behind the fence."

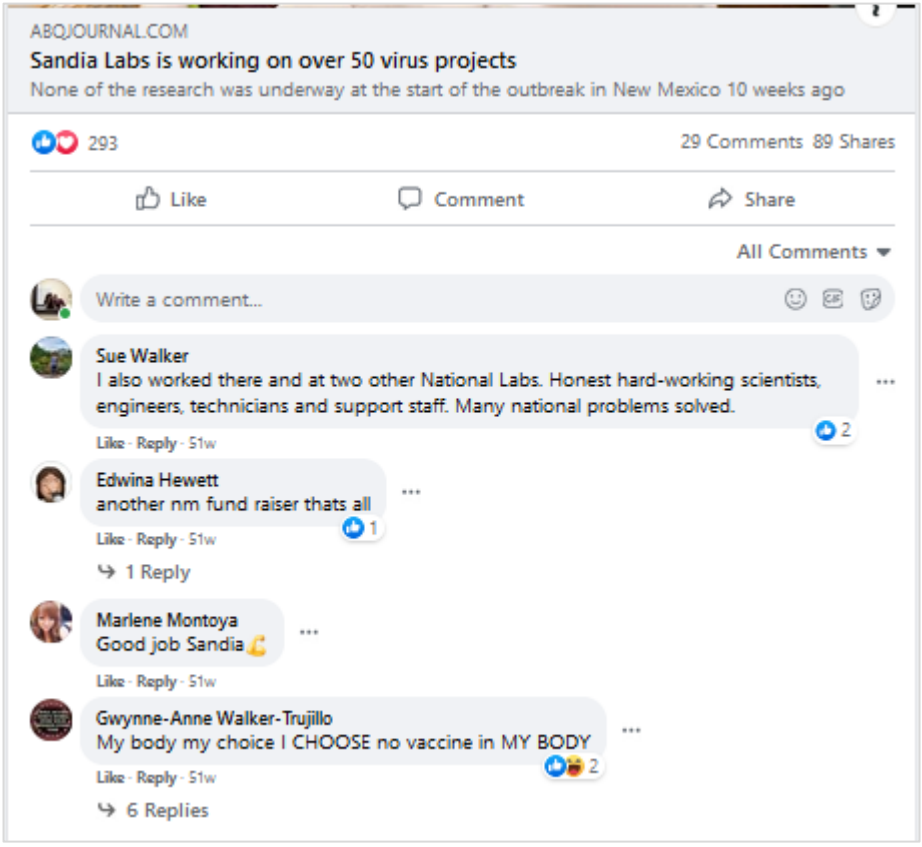
There are personal and collective traumas embedded in the discourse, as implicitly noted by several interviewees:
"[There's a] need for greater transparency in terms of assessing and messaging trust/safety in the kind of science that is happening." (trust and safety issues)
"[There's] communication problems; how do you create positive gossip? If you're going to talk about something talk about 'this' not 'that.'" (communication issues)
"It's not set up for the public goals." (indicating neglect)

The micro, meso, and meta levels are essential to analyze when it comes to extracting objective insights from the subjective comments from the interviewees. The definitions being interjected by certain tech sectors in order to maintain and/or persuade certain interests that their work is beneficial and necessary creates a Physiological → Psychological → Mythological disorientation to sustainability with orientations to "national priorities." Hence, the skepticism and challenging messages sent to the authority figures when issues like economic development and bringing in outsiders are involved in the discussion about "what is(n't) going to be best for the locals." The Labs are a metaphor for what happens in a security-driven state: "Science and suits" are beyond being like the local communities they are dropped into.

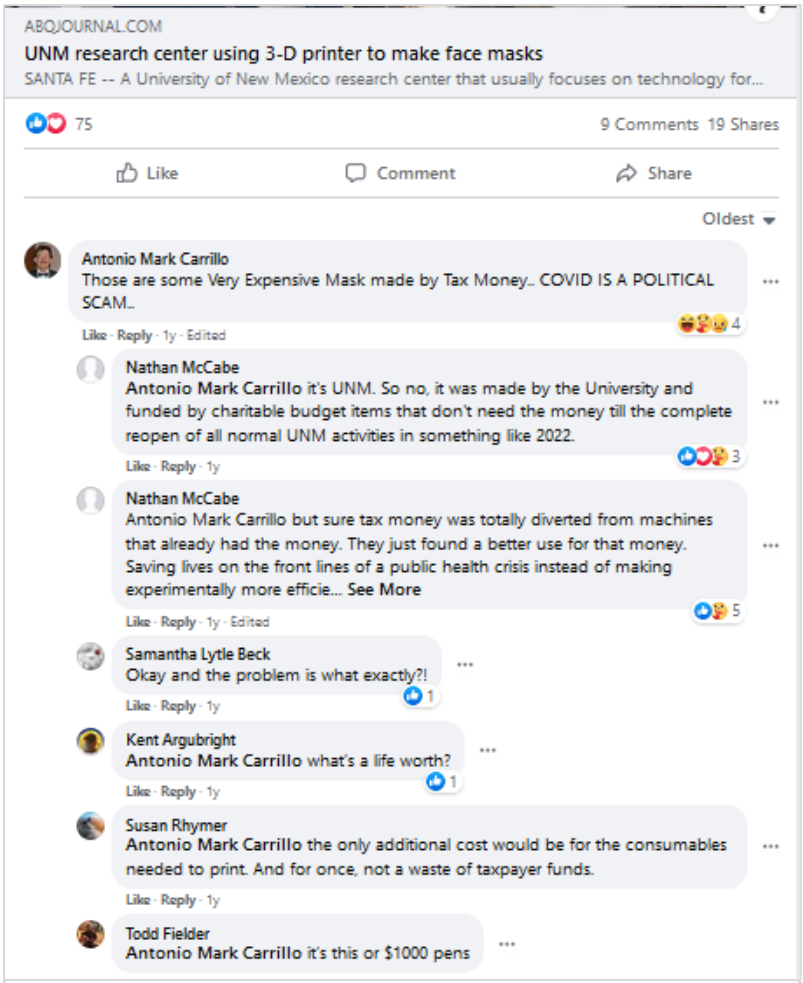
Future research may focus on how New Mexico can blend the Tech sector and local communities in order to adequately develop the native New Mexican mindset alongside the New Mexican technology landscape. If research and outreach bridge the above insights, communication styles, and mindsets, it will bring to light a variety of resources for blending the local communities with the tech sector and expanding the collective mind-map.

"Is the system going to flatten you out and deny you your humanity, or are you going to be able to make use of the system to the attainment of human purposes?"
-Joseph Campbell

SOCIAL MEDIA DIALOGUES: INSIGHTS

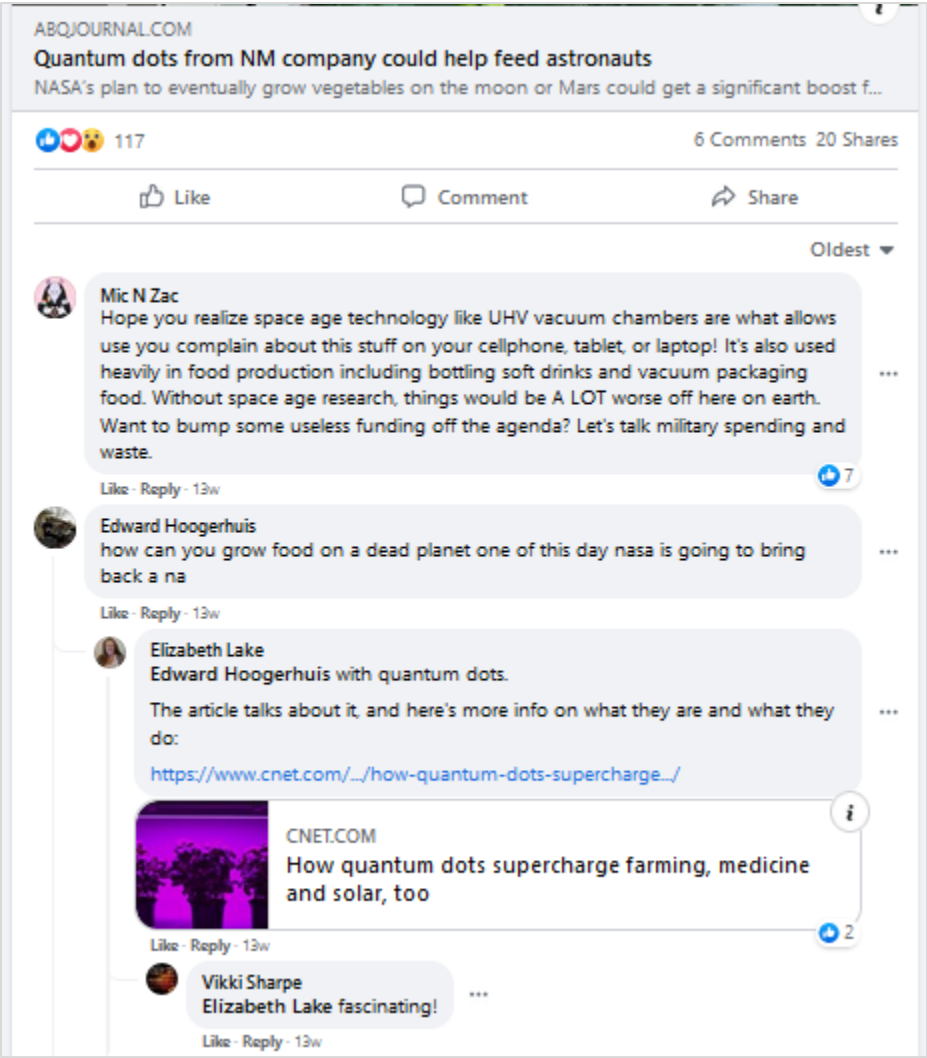


The comments on an ABQ Journal post about Sandia Labs working on COVID projects indicate a rift between those who have worked in the labs and those who, presumably, haven't worked in the labs. Those with inside knowledge of the systems have trust in the systems and people, while those living on the outside don't trust the funds – either in source or in use. However, there are general comments like Marlene Montoya's saying good job without going into detail like critics, like Edwina Hewett, often do.



This ABQ Journal article on a UNM research center re-orienting to create masks includes comments that indicate resentment and contentiousness toward the center. The politicization of COVID, plus the distrust toward the scientific tech realm, foster contention, even when the output is community benefit driven.

The comments on this article from ABQ Journal about NM tech helping to control industry pollution highlight how deeply rooted land preservation, land rights, and environmental awareness are in the minds of those in the state.



These comments are prime examples of people not understanding the particular tech they're discussing, tying in national priorities (or what they think the national priorities should be), and attempting to figure out what tech is bringing in. These participants are unsure about what these particular technologies are going to do for or to the world and how they will be affected by it.

Editor:

With the stealthy and rapid roll out of 5G technology, soon the American people and every living creature worldwide, will be unknowingly involved in the most dangerous experiment in history. We'll be bathed in frequencies sentient life forms have not previously been exposed to, frequencies we did not evolve with.

The millions of new small cell towers will be placed in every neighborhood very close together, with plans of also putting them in space. The goal is to seamlessly encircle the entire planet in this fog of high frequency radio waves.

What do we get? Faster internet speeds and "smart" homes, with all our electronic gadgets connected to each other. What we will also get is increased cancer rates and other serious ailments, and whatever yet unknown disasters may arise for ourselves, other life forms and the planet.

Research on safety has not been done. We need to act now.

Bette Andresen

Ojo Caliente

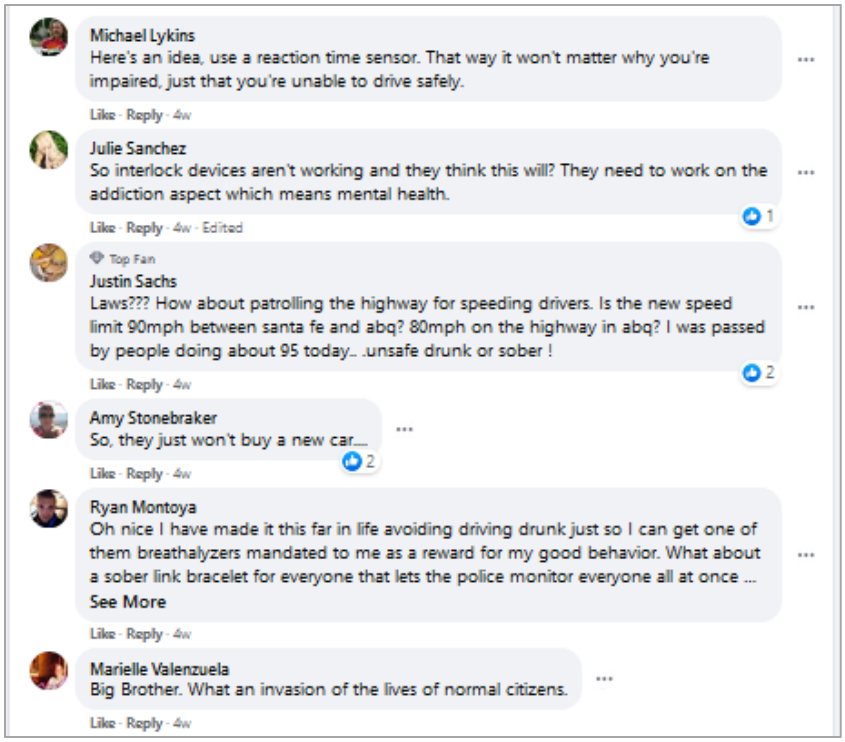
This is a letter to the editor of the Rio Grande Sun. This is an example of people not knowing the effects technology will have on them, their families, and their communities. The pushback in this letter provides a good illustration of the distrust and unsurity that many feel when it comes to the tech sector, especially because this elucidates the issue of many community members not knowing how much research goes into tech advancement, and causes and effects.

OTHER SOCIAL MEDIA-BASED NOTES:

- The Las Vegas Optic put up a story on their social media about NMHU receiving a grant for distance learning, which quoted the lead researcher on the grant from the university. The comments were full of people congratulating the grant researcher, Edward Martinez, specifically.
  - "You are an inspiration Dr. Martinez!"
    "What a great asset to HU. Edward… you rock"
    "Congrats Dr. Martinez! Thank you for your leadership!"
  - These comments are potential indications that when a single person fights for tech expansion in a way that benefits the community, it is seen as benevolent. It is possible that the singling out of a person makes the tech sector seem less daunting. It is also possible that this particular demographic has been feeling pushed to the side in terms of accessibility, so this comes as a welcome development.

- The Optic also published a story on the Las Vegas school board approving a plan to distribute Chromebooks and tablets to students after the pandemic was underway. This was an expedition of their previous plan, which was to faze in the technology to students over three years.
  - "They should have already had these. Every other school district has them."
  - This particular comment illustrates frustration in equal accessibility to tech (or lack thereof), as well as a potential frustration with the "gatekeeper" effect: There is a potential underlying resentment about certain parties, such as the school board, acting as gatekeepers of tech accessibility.

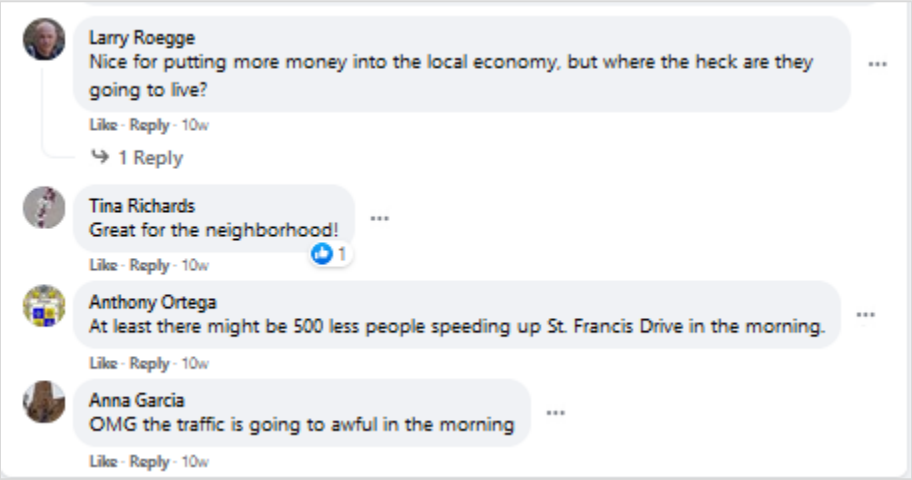
- The Santa Fe New Mexican published an article to their social media feed about tech being installed in new cars to prevent drunk/impaired driving. Here are the comments:



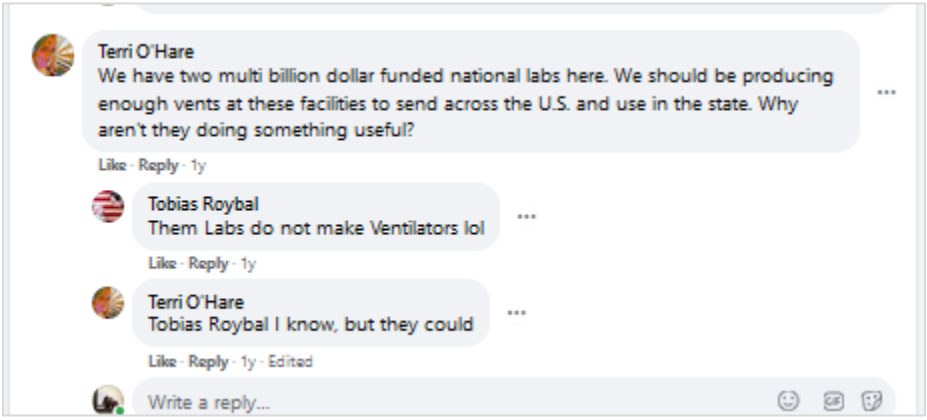
These comments indicate the mindset of community members: They feel this particular tech advancement is an invasion, they don't trust it, and they feel micromanaged/closely watched.

This particular dialogue further highlights how deeply embedded ideals of water conservancy, public safety, and community well-being are, and how tightly those ideals are grasped onto when tech expansion is discussed.

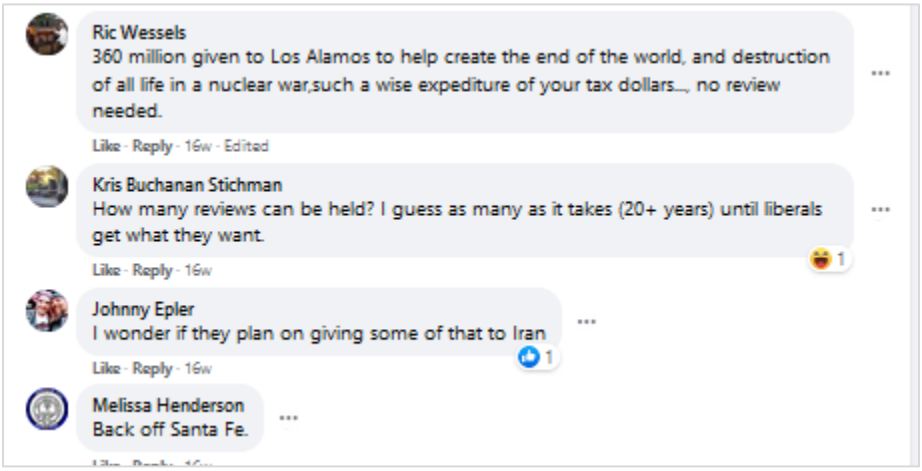
- When the Santa Fe New Mexican put out an article discussing LANL's expansion into Santa Fe, the comments section further highlighted locals' resentment toward encroaching tech:



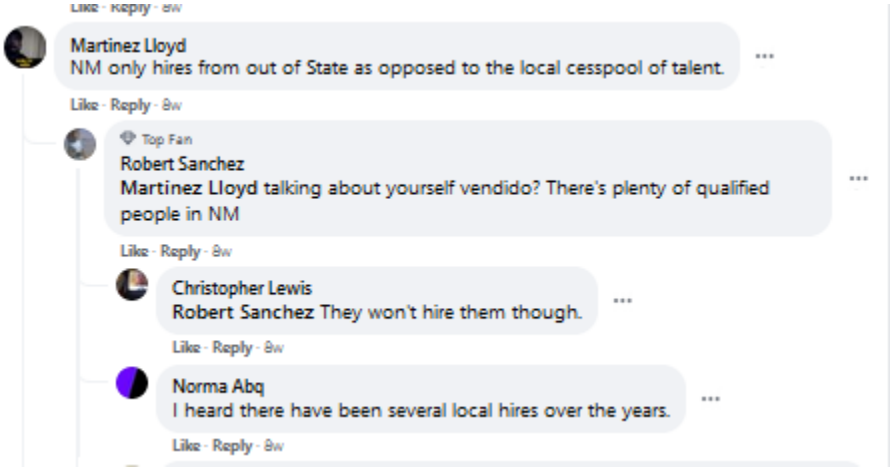
- Interestingly, after seeing the above examples regarding the distrust of the labs' ability/intentions in producing pandemic-related community deliverables, comments on a Santa Fe New Mexican article discussing New Mexico's ventilator shortage around the peak of the pandemic in April 2020, the labs were also criticized for not producing ventilators and COVID-helpful deliverables:



- On a KRQE article about LANL plutonium core production, there were several comments that indicated resentment toward the labs' work, politicization of the work, and resentment about the labs' encroaching on local communities:



- There were also comments on a KRQE article about LANL's and Sandia Labs' participation in a virtual job fair that indicated resentment about not hiring enough locals, which was a topic touched on in the conversations:



- ABQ Journal: "Tech Can Lead the Way in NM," 4/13/2020
  - This article displays words like "perverse," "taxes," "never," and "crime," which are emotionally evocative and subjectively experienced by both writer and reader. The reader is primed for emotion through the language used in the article about tech.

- ABQ Journal: "ABQ is the 6th Best for Woman in Tech Study Says," 2/20/2019
  - These types of positive, uplifting articles are blips, often buried underneath a wide range of opinion articles that dictate much of the tech sector's collective conscious and public's

collective perception of the tech sector.

- ABQ Journal: “Crime Downtown Worries Tech Firm,” 6/24/2017
  ABQ Journal: “Landlord Files Lawsuit to Remove LAVU from Downtown Office,” 9/29/2020
  - These two articles are worth noting in terms of developing context about LAVU specifically, which the tech sector had high hopes for, referring to them as “one of ABQ’s shining high-tech startups” in the first article, while in the conversations, the company was referred to as a disappointment and a “flash in the pan.”

- ABQ Journal: “UNM Dean: Growing a High Tech Workforce will Take Support,” 5/12/2021
  - This article is a great example of the siloing effect noted throughout the conversations, especially when speaking about the connection and disconnection between the research labs, university, and business sector.

KEY TAKEAWAYS:

Table of keywords from each category of conversations (includes implicit and explicit)

Lab History	Software Tech	Media Tech	Infrastructure	Ag Tech	Bio Tech
Position/positioning	Success	Place	Identity	Tradition	Institutions
Tension	Resources	World	Colonial	Acequia	Economic drivers
Discussion	Confidence	Platform	Dystopian	Modernization	Perception
Expansion	Inclusion	Virtual	Hyper-controlled	Land-based	Rain water and rivers
Growth	Community	In ("in website")	Identity	Acequia	Safety
Contentious	Innovation	Lounge (virtual lounge)	Entity	Water	Scared/concern
Fallout	Differentiator	Place (virtual place)	Film industry	technology	Wall (metaphorical)
Change	Pushback	Experience	Bandwidth	economic development	Historical perceptions
Multidisciplinary	Spawn	Evolving/evolution	Sovereignty	progress	Brain drain
Secret	Defensive	Opportunity/ innovation	Colonizing		complex
Mysterious	Value	(De)Colonization	Fracking		academic
Distrust	Outside (outsiders vs outside of state)	Progress	Tradition		difficult to communicate with and work with
Public perception	Privacy	History	Hot spots		not set up for public goals
Nukes	AI	Opportunity	Cellphone		economic/job driver
Impact	transformation	Innovation	Device		super computing
Intellect	disruption	Technology	Libraries		Job driver
Clusive (ex- and in-)	breaking status quo	Development	YouTube		Generate
Partnerships	capital	NFTs	Playstation		health
exclusive, insulated, risky	leadership	Marginalized communities	Connection		contamination
fortress	Change	Receiver	Trust		Radiation
siloed, systems-level walls		Impact	Building		Bomb
paradox		Force (to be reckoned with)	Zoom		Cancer
inaccessible, behind-the-fence		technology	ownership		LANL
progress, modernity, frontier		funding	rootedness		
money, suspicious, cool, irrelevant		place	hybridity		
			modernization		
			5g		

incompetent, hope		diversity innovation/whimsy culture experience culture/innovation/ entrepreneurial	cell towers digital divide uproot rights heritage control sovereign rights sovereignty Safety Security Biotech Email Paypal Google it Crowdsourcing Digital equity Digital inclusion Digital divide transparency		

- ❖ Lab History:
  - The timelines, history, and clusivity messaging came through strong in this conversation. The military/defense history of much of the tech in the state, combined with tangible barrier metaphors, created a mindset of pulling the thread of time through to the present. The military-based imagery from the past lives on in the metaphors of ex- or inclusivity, and the resultant (in)security mindsets of the community members and tech workers. The participants were very aware of exclusivity perceptions within the communities, as well as the insecurities that are embedded as a result of the security-necessitated secrecy, but they were also hopeful for the future of tech and for the future of locals' perceptions about the labs.

- ❖ Software Tech:

- Evolution, innovation, transformation: These are all key concepts from this conversation. This particular group was focused on transformation, change, and necessary commotion in order to progress and iterate tech forward. They were also keenly aware of the pejorative community perceptions about the tech field in the state, however, they remained focused on success, capital, and innovation.

❖ Media Tech:
- The media tech group utilized a variety of metaphors that indicated that the virtual/digital realm is one that is becoming spatialized in people's minds: They see the digital arena as one in which experiences and events can be held. They also indicated being acutely aware of colonization practices, exclusivity issues, and marginalization effects, which means that while digital/virtual realms become spatialized, there must be some effort made to avoid colonization, gentrification, and clusivity concerns. Additionally, this group also brought in ideas of progress and evolution concerning tech.

❖ Infrastructure:
- This conversation centered heavily around colonization, gentrification, ownership, matters of land disputes, and questions of control. They implicitly recognized the need for agency when combating these issues (i.e. there need to be leaders/figureheads that help communities recognize and respond to these issues). Tangible technologies (devices, internet, etc.) are now surrounded by the problem of accessibility, and the group highlighted the need for equity, equal ownership, accessibility, and inclusion when discussing technology, the land technology utilizes, and the tools technology creates.

❖ Ag Tech:
- The agricultural technology group indicated that they wanted to redefine the term "technology," as the state has been using water-based technologies for many, many years, but, according to the group, these technologies are often left out of tech conversations. Land, tradition, and the state's cultural histories were heavily stressed, both implicitly and explicitly. Conservation, resource preservation, and cultural equity, accessibility, and recognition were implicitly – although still heavily – emphasized.

❖ Bio Tech:
- During this conversation, the group acknowledged the historical ramifications of secrecy, military experimentation, and separations between the community and tech workers. However, much of the focus of the participants was on the (potential) benefits of their tech community: Jobs, economic growth, safety, etc. Interestingly, more than any other group, they also acknowledged the potentially harmful effects from New Mexico's tech like nuclear bombs, radiation, cancer, etc. They also highlighted the tech arena's lack of public accessibility (and the lack of foundation for such accessibility), the difficulty of working with the tech sector, and the concerns of local communities about tech.

❖ Summary:
- Many conversations overlapped in their acknowledgment of the state's history of colonization, marginalization, and inequality, although some more heavily emphasized

these key categorical concerns than others. They also, for the most part, converge in their discussions on accessibility, tech progressions and evolutions, and the importance of tech. However, different groups used different lenses for viewing the tech sector and understanding the dichotomy between community perception and tech implementation. Future research may focus on these specific convergences and divergences, as well as the nuances in convergences, in order to cultivate greater understanding of potential ways to build future communicative bridges.

Understanding the tech transplant vs. native New Mexican mindsets will help build up a relevant lexicon for communicating to each party. Utilizing similar metaphors, tones, and keywords as the party being communicated with will alleviate concerns about identity disruption and resource confiscation.

Paths to each community will be paved by relying on useful metaphor migrations (e.g. helping “fortress” drift into “partition,” “force” into “movement,” etc.), relevant historical context (i.e. helping communities understand past tech experiments and their reasoning), cultural acknowledgement (i.e. educating the tech community on locals’ belief systems, mindsets, and social standards), and appropriate assimilation of tech into the New Mexican culture (i.e. giving the tech sector tools, through communication and preferred regulatory standards, to accommodate the NM culture into their structures). Allowing each side to map out the other side’s mindset will alleviate concerns and help build – and broaden – fruitful bridges. This will address mind masking and aid in increasing mind mapping.

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Santa Fe LABS for Food Entrepreneurs

2020 and 2021 Cohort Impact Reports

"THIS PROGRAM HELPED ME DEVELOP MY CONFIDENCE. I AM NOW WAY MORE COMFORTABLE TALKING ABOUT MY COMPANY TO POTENTIAL CUSTOMERS, MENTORS, OR INVESTORS."

-Food LABS Alumni

THE FUTURE OF FOOD

The City of Santa Fe is building an inclusive food ecosystem for the innovative startups tackling the world's most pressing problems.

The participants in our 2020 and 2021 Food LABS cohorts exemplify the diversity of Santa Fe's food ecosystem and the City of Santa Fe's vision for a sustainable future.

They shine as businesses that are driving innovation in the local startup ecosystem while thinking critically about our relationship to community, place, and our natural resources.

2020 Cohort

ONE YEAR IMPACT DATA

"THIS PROGRAM GAVE ME THE SKILLS TO ANALYZE AND DREAM UP THE SHAPE OF MY COMPANY."

-Food LABS Alumni

2020 COHORT

12 local companies were selected, 9 are still in business and considered here for data analysis.

arable

TENDER FIRE KITCHEN SF NM

stargazer pure tea kombucha

the PICKLE JAR SMALL BATCH · RAW · CULTURED

KATE & ADRIAN'S SPICY HUMMUS

TROUT SPRINGS BOTTLED WATER

ENCHANTMENT CAKES + COOKIES

LETTUCE, ETC.

desert verde FARM LLC

PROGRAM IMPACT

$772 THOUSAND INCREASED REVENUES

6 FULL TIME JOBS CREATED

$176 THOUSAND INVESTMENT INCREASED

14 PART TIME JOBS CREATED

PROGRAM IMPACT

80% INCREASED KEY BIZ KNOWLEDGE

80% POSITIVE DIGITAL EXPERIENCE

60% INCREASED BIZ NETWORKS

$22,122 ACTUAL CONTRIBUTED TO GRT

$65,234 TAX BASE CONTRIBUTION

76 INDIRECT JOBS CREATED

SOCIAL ENGAGEMENT

Our social events were held online due to COVID and we're excited to re-launch in person!

Nov. 17th - Workshop

Norma Naranjo
Ohkay Owingeh
Founder, The Feasting Place

March 22nd - Webinar

Ray Naranjo
Santa Clara, Odawa
Chef, Pueblo Harvest Kitchen

May 27th - Instagram Live!

JJ Johnson
NYC
Founder: Fieldtrip

SOCIAL ENGAGEMENT

Additional Instagram Live! digital events highlighting Santa Fe's food ecosystem

Opuntia Cafe
Founders Jeanna Gienke and Todd Spitzer

Feb 4th

Los Foodies
Founder Eric Martinez

Feb 12th

Los Poblanos
Executive Director Matt Rembe

Feb 15th

Squash Blossom
Founder Nina Yozell-Epstein

Feb 18th

Santa Fe Brewing
Owner Brian Lock

March 11th

Yazzie The Chef
Chef Brian Yazzie

April 2nd

2020 STARTUP SPOTLIGHT

Alison Schmitt
Stargazer Kombucha

Nominated for a "Local Hero" award from Edible NM Magazine and developed new partnerships to feature Stargazer at Santa Fe gyms and fitness facilities.

Nate Downey
Lettuce, Etc.

Working on purchasing space for a new aquaponic greenhouse in Santa Fe!

Brad Jarman
Enchantment Cakes & Cookies

Developing new partnerships with other Santa Fe businesses to fill gaps in their productions (i.e. gluten free desserts).

2021 Cohort

POST PROGRAM IMPACT DATA

"I LEARNED HOW TO REALLY LISTEN TO MY CUSTOMERS, TO UNDERSTAND MY PRICING, AND TO BE CONFIDENT IN CHARGING MY VALUE!"

-Food LABS Alumni

2021 COHORT

6 local companies were selected for the program and 5 completed.

STOKLI

SPROUTING Kitchen

/SHED
Johnny Ortiz, founder

NEW MEXICO BISCOCHITO COMPANY
TRADITIONAL
HOME OF THE BISCOCHITO

VIDA BY GINA

2021 COHORT OUTCOMES

60% INCREASE IN CONFIDENCE

80% INCREASE IN KEY KNOWLEDGE

80% WOULD RECOMMEND PROGRAM

100% NOW HAVE THE MENTORS THEY NEED

60% NOW HAVE THE NETWORK THEY NEED

2021 MENTORS

Reneé Fox

Santa Fe

Arable Restaurant

Steve Prickett

ABQ

Eldora Chocolate

Brian Lock

Santa Fe

Santa Fe Brewing

Justin Harter

NYC, NY

City Sticks

Sri Dasgupta

Lancaster, PA

Upohar Cuisine

Justin Muehlmeyer

ABQ

Peacock Law

2021 STARTUP SPOTLIGHT

Fallon Bader
The Sprouting Kitchen

Built new partnerships with farms across the Albuquerque and Santa Fe. Since pivoting to include online classes, Fallon has hosted 100+ digital cooking events.

Johnny Ortiz & Maida Branch
Shed Project

Johnny and Maida are pursuing purchasing space in Northern NM and Johnny just completed an illustrious chef residency at Blue Hill at Stone Barns (NYC).

Marianne Sundquist
Stokli

Stokli launched their online dry goods store and has quickly grown their subscriber base while connecting with brands across New Mexico.

2021 STARTUP SPOTLIGHT

Kelly Airhart
Kelly's Christmas Shop

Kelly is further developing her immersive Christmas cafe/shop and looking for space to house her experience. She is also publishing her 2nd children's book later this fall!

Richard Perea
New Mexico Biscochito Company

Richard is working on new partnership's for selling his biscochitos including with Santa Fe restaurants, hotels, and even breweries.

RE-LAUNCHING UNEARTHED!

*After being postponed due to the pandemic we are excited to be re-launching our in-person social networking events! "**Unearthed**" is a quarterly feast of words and wisdom, discussion, and debate exploring the future of food and Santa Fe's entrepreneurial ecosystem. Originally planned events to be hosted include the following (speakers subject to change).*

What's Good for the Planet is Good For Your Portfolio

An exploration of the role of entrepreneurship and venture investing in building stronger food systems and communities.

Stefani Bardin (Food + The City at NYU); Tom Spier (Boulder Food Group); Betsy Fox (Forklift Foods).

Decolonizing the Plate

An interactive evening with Native chefs leading a palate tour of reclaimed indigenous dishes.

Lee Francis (Native Realities); Jose Duarte Taranta Restaurant); Lois Ellen Frank (Red Mesa Cuisine)

Artisan Cuisine as Advocacy

A problem-solving-driven seminar around the intersection of culinary design and social commentary.

Orkan Telhan (Emerging Design Practices, University of Pennsylvania); Jen Monroe (Bad Taste NYC)

Super-foods and the Future of Growing

A forward-thinking discussion about the audacious startups boldly developing new growing technologies to meet the needs of future populations.

Andrew Carter (Small Hold NYC); Rachel Wenman (Urban Seed)

"AFTER THIS PROGRAM I NOW FEEL LIKE I HAVE THE TOOLS I NEEDED TO REALLY HONE THE GROWTH OF MY BUSINESS."

-Food LABS Alumni

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Santa Fe Brewing Co

Dion's

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Historic Inn & Organic Farm

Eldora
Bean to the Bar
Craft Chocolate

Meow Wolf

Santa Fe Community Foundation

Mucho
The Gourmet Sandwich Shoppe

La Fonda
On the Plaza

form & concept

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