

Regional Economic Development Initiative

Film & Digital Media Cluster

Industry Development Plan

Review Draft - As of November 18, 2010

Prepared by:



David Breecker Associates
505-685-4891

David@BreeckerAssociates.com

Table of Contents

<i>Executive Summary</i>	3
<i>Glossary of Acronyms</i>	7
<i>Introduction & Overview</i>	8
Definition and General State of Cluster	10
<i>Vision & Strategy</i>	15
Overall Strategy	15
Action Areas	16
Specific Sectors	18
Case Studies	26
<i>Organizational Structure</i>	29
The Social Network	30
Operating Structure	31
<i>Enabling Factors</i>	38
Entrepreneurial Support	38
Facilities & Infrastructure	39
Workforce & Professional Development	41
Policy & Incentives	41
Marketing & Communications	43
<i>Project & Program Ideas</i>	44
<i>Implementation</i>	48
Implementation Partners	48
Priority Actions	48
Potential Resources Available	50
<i>Appendices</i>	53

Executive Summary

This industry plan for the north-central NM Film and Digital Media Cluster (FDMC) is part of a comprehensive, long-term planning effort for Northern NM known as the Regional Economic Development Initiative, or REDI.

“Film and digital media” encompasses a very broad range of businesses, techniques, and competitive and success factors. For purposes of this plan, the major areas to consider are: film, TV, and other narrative media content (including production and post-production); digital media (content and applications, including games, mobile, web-based, and immersive formats); and media technology (hardware and software).

Context, Structure, Opportunities

The FDMC industries under consideration in this plan are structured differently than most conventional industries, and are also undergoing profound shifts in terms of access to financing, production, and distribution. Moreover, NM’s media industries are uniquely structured by virtue of the influence of the State incentives, the work of the Film Office, and the implementation of the State’s media industries plan.

The overriding factor in assessing the regional media industries is that they are dominated by the “core business” of hosting visiting film and TV productions, which accounts for virtually all of the economic, business, and employment activity in the domain. The core business is, in turn, driven largely by the State’s 25% tax rebate; and supported by the availability of professional crew via IATSE Local 480, and the Film Office.

Therefore, in broad strokes, the priorities and opportunities for the REDI region are the same as those recommended in the State media industries plan:

- Protect and expand the core business, with special attention to capitalizing on Santa Fe’s as one of two main production centers (along with Albuquerque) to create more opportunities in the rural areas
- Develop a homegrown, NM production sector for film, TV, and other formats
- Develop a technology-based capacity for new platforms and applications that can drive an entrepreneurial sector and support homegrown production

Strategy

The REDI region should endeavor to complement the crew- and support-based core business with a *creative entrepreneur* vision, focus, and strategy. This creative entrepreneurial vision should encourage, develop, and support small-scale “media entrepreneurs” of all kinds, ideally leading to a “cottage industry” of advanced media practice that also supports and is supported by the core business activity.

From a competitive strategy standpoint, the REDI region’s sweet spot and value-added differentiation is at the convergence of *Content, Culture, and Technology*. Therefore, the general approach to developing the region’s media industries should be to encourage creative entrepreneurs working at this intersection. Specific recommendations are:

Core Business

There are two ways to grow the core business for the region: attract more productions (which will be difficult, unless region-specific incentives are put into place), or derive greater value from those already shooting here (which is feasible). The latter can be achieved by enhanced coordination between the various parts of the region; by preparing local businesses and service providers to work with films; and, possibly, by creating a regional film liaison position and staffing it with a highly qualified individual.

Digital Media

The digital media sector will benefit from the “creative entrepreneur” approach more than any other. This is where the increased access afforded by new technologies and distribution platforms is having its most profound effects, and can create opportunities for New Mexicans. However, the current level of activity is still modest and in its early stages of development, and mostly concentrated in Santa Fe. Therefore, priority actions will be to encourage large numbers of creative entrepreneurs through outreach, education, and support throughout the region, and to ensure they have the resources needed to take advantage of the emerging technological and structural opportunities.

Homegrown Production

In this sector, we recommend using the recently completed Santa Fe County film & digital media plan to create a foundation for the REDI region. The County plan has a primary focus on independent (i.e., non-studio) feature film production, with an emphasis on mid- to low-budget levels extending down to the so-called micro-budget range, with the intent of developing a locally based production community.

Santa Fe can accomplish this by marshalling its varied resources in support of *delivering more value for every production and distribution dollar* for the cost-conscious independent; and then leverage that capability and focus into other media formats, platforms, and technologies. The immediate priority action is to develop mechanisms to provide access to production financing and distribution for local filmmakers.

Structure

We recommend a “Hub-and-Spoke” architecture for developing the regional cluster, with Santa Fe as the main hub, local nodes at the edge, and proactive systems and resources to make it work throughout region. The north-central region already enjoys an extraordinarily large and diverse array of programs and institutions working in the film and digital media domain. The challenge will be to *support, coordinate, and leverage their existing and ongoing efforts*, with strategically targeted additional resources.

Operating Structure

REDI should organize a Coordinating Council of key stakeholders and participants, which should meet regularly to provide close coordination between:

- Regional and Santa Fe core business facilities and services, specific productions, and general opportunities
- NMFO and regional liaisons, database, activities

- Filmmaking, digital media making, and media technology communities
- The four REDI clusters, to identify opportunities for joint action

Workforce & Professional Development

With few exceptions, the region is more than adequately covered in the areas of workforce training and professional development. These institutions and programs are natural partners for REDI. That said, there are chronic shortages of cash and resources, and REDI should seek to support these programs to the extent possible, while co-developing new initiatives geared to the strategy in this plan.

One key area for growth and improvement is internship opportunities with professional productions, including film, TV, and digital media. And one important exception appears to be basic computer science and programming skills, for digital media technical work.

Policy & Incentives

The area of policy and advocacy may be the most important, or at least timely, for REDI's action plan. Because the existing core business rests on the rebate program, *if the rebate is eliminated or substantially limited, the business and the opportunity to expand beyond it may be crippled.*

REDI should therefore form a task force immediately, with a priority mandate to prepare for the next legislative session, comprised of all regional players with a role to play in strategy formation and advocacy, and in association with all State-wide groups and initiatives working on this challenge.

Marketing & Communications

This will be an important component of the FDMC's development, for both internal and external needs. Branding, marketing, and communications are all important elements, and if funding permits, should be developed with professional support.

An overall brand and identity for the region covering all sectors (location filming, digital media, and technology) will support a marketing effort to bring films and talent here, and to make northern New Mexicans aware of the opportunities that exist in this industry. A robust web platform should be at the core this effort. In addition to marketing the region to external audiences, the web platform can also provide practical information on resources, locations, assets, personnel, and procedures.

Projects

Actual hands-on project work will be the single most valuable thing REDI can provide to the region's aspiring media makers. Priorities are to develop local production demand; increase internships; and proactively launch a "grand challenge" project (e.g., in support of the State Centennial, or a NM Digital Cultural Archive) that can enlist the full region's media talents, skills, and imagination.

Implementation Plan

REDI will launch the plan's implementation with these priority actions:

Core Business

- Form a task force for lobbying, communications, and advocacy to protect the rebate; ensure a qualified person leads the NMFO; and explore rural incentives
- Localization, business preparedness, information, and cross-selling and location coordinating activities
- Form a task force to assess need for and feasibility of a regional film liaison

Homegrown Production

- Act on key recommendations of County Plan, beginning with a finance experts group to develop access to these resources for local media-makers

Digital Media

- Form local communities of interest and practice, and support them via expert outreach and inreach
- Plan for telecommunications infrastructure as part of REDI Net
- Grand Challenge projects

Media Technology

- Connect technologists, researchers, and inventors with content makers
- Connect LANL-based intellectual capital with the cluster community

General

- Establish a coordinating council of all regional partners
- General industry networking, communications/website, and community building
- Enhance entrepreneurial support and culture across media sectors

Glossary of Acronyms

The following acronyms and abbreviations are used throughout this document:

- 480: IATSE Local 480 (State union local covering most film crew positions)
- ATL: Above the Line (writers, directors, producers, etc.)
- BTL: Below the Line (technical crew)
- CCT: Center for Culture Technologies (DCA/NMHU partnership)
- CGI: Computer generated imagery
- FDMC: REDI Film & Digital Media Cluster
- Garson: Garson Studios
- IAIA: Institute for American Indian Arts
- LANL: Los Alamos National Laboratory
- Milagro: The Milagro at Los Luceros programs and facilities
- MISP: Media Industries Strategy Project
- NMFO: New Mexico Film Office
- NNMC: Northern NM College
- Post: Post-production
- SFCC: Santa Fe Community College
- SFS: Santa Fe Studios
- SFUAD: Santa Fe University of Art & Design
- VFX: Visual effects

Introduction & Overview

This industry plan for the north-central NM Film and Digital Media Cluster (FDMC) is part of a comprehensive, long-term planning effort for Northern NM known as the Regional Economic Development Initiative, or REDI. It was prepared by David Breecker Associates under the direction of the Regional Development Corporation, project manager for REDI, and involved the input of numerous stakeholders and experts throughout the region (see Appendices for a list of participants).

REDI Overview

REDI is Northern New Mexico's Regional Economic Development Initiative, covering the counties of Santa Fe, Rio Arriba, Los Alamos and Taos. The REDI Strategic Plan, completed in 2008, is a long-term, 25-year plan for economic development in the region. Currently, REDI is implementing several aspects of the plan, including Regional Broadband, Economic Development Services, Cluster Strategies, and a Public-Private Partnership to sustain the effort.

REDI is one of Los Alamos County's Progress through Partnering initiatives, funded by Los Alamos County gross receipts tax revenue and managed by the Regional Development Corporation. REDI was initiated in 2007, through cooperative agreements among Los Alamos County, the City of Santa Fe, Santa Fe County, the City of Española, Rio Arriba County, Taos County and the Town of Taos. In recent years, regional partners have grown to include tribal governments and private sector entities in the Northern New Mexico region.

The Cluster Plans

As part of the initial strategic planning, a regional consensus identified four industry clusters as the areas in which more detailed planning should be concentrate:

- Renewable Energy/Green Industry
- Technology
- Value-added Agriculture
- Film and Digital Media

Of these, the first two are complete (and available at the REDI website along with further information, <http://nmredi.org>), and the second two are currently in their final stages.

Broader Regional Industry Context

Planning for the film and digital media industries is shaped by prior NM efforts in this domain, notably the statewide Media Industries Strategy Project (MISP) and the Santa Fe County Film and Digital Media Roadmap.

MISP was completed seven years ago and has been used as the master plan for growing the State's industries, supported by the NM Film Office (NMFO) and approximately \$15 million in implementation funding via Governor Richardson's office, a substantial

amount of which was invested in education and training programs in the REDI region. MISIP has three central strategic recommendations:

1. Protect and grow the “core business” of hosting visiting film and TV productions
2. Develop a home-grown production community and capacity, to develop, finance, produce, and distribute NM-made media
3. Expand into alternative and digital media platforms, formats, devices, and technologies

Considerable progress had been made in all of these areas, with the caveats that the incentive program at the heart of the core business has been under pressure in the legislature, and that there is much more to be done in the home-grown and digital media adjacencies.

The County Roadmap was completed in early 2010, and follows the same basic strategic recommendations as MISIP, with an intentional emphasis on leveraging the presumed presence of Santa Fe Studios (SFS) in order to create a viable independent, NM-based production community. It is in its earliest implementation stages.

The City of Santa Fe’s economic development vision is also a contextual factor. This includes the Future Economy Sub-committee Plan, the St. Michael’s corridor redevelopment vision, SFUAD’s development trajectory, the proposed Higher Learning Center and other proposals for the State-owned parcels there, Santa Fe Complex, and other initiatives and plans.

Economic Development Principles

All of the plans discussed above, including this one, follow the “triple helix” concept: that is, the private, public, and educational sectors must work in close partnership to achieve meaningful results. In the case of NM, the National and Military Laboratories can play an important role, and like the higher education sector are a source of R&D and intellectual capital and property.

Other critical factors employed in this analysis, as cited in a recent Brookings Institution report on regional innovation clusters,¹ include:

- Don’t try to create clusters from scratch
- Target interventions and track performance
- Focus initiatives where there are clear gaps
- Leverage pre-existing programs

Industry Trends & Context

The mainstream film and television business is an industry in the throws of radical disruption. Digital production and distribution are a reality; Netflix will become a powerhouse in film streaming, accompanied by Apple, iTunes, YouTube, Hulu, Comcast,

¹ http://www.brookings.edu/papers/2010/0921_clusters_muro_katz.aspx

and others, as Blockbuster goes bankrupt. The impact on the mainstream feature business (and therefore NM's core business) will not be felt for some time. But the "long tail"² is getting longer, access is getting easier, and it includes new formats like iPhone and iPad apps for delivering media "content." This level of disruption, as always, creates both risks and opportunities. And in the case of NM, both are very real and very present.

In addition to these technology- and market-based trends, general macroeconomic conditions, structural conditions in the industry, and current production trends will have a continuing impact on the local business: overall production level is down at the studios, along with development and producer deals, with constant pressure to reduce costs, salaries, and shooting schedules. Tentpoles, franchises, remakes, sequels, and reboots are increasingly the focus of studio production slates, with less appetite for risk and experimentation. Digital disruption has damaged the all-important DVD business, but has not yet replaced it as a dependable revenue stream, and digital business models are still unclear. New capital from outside the industry is starting to stream in finance independent and low- to mid-budget films, to take advantage of these opportunities.

In many respects, the mainstream business is embroiled in a classic (and perilous) disruption scenario, in which new technologies and entrants are threatening the studios' core business, but they can't afford to jeopardize that core business in order to experiment and take advantage of the disruption. This will have at least an indirect effect on NM.

Definition and General State of Cluster

"Film and digital media" encompasses a very broad range of businesses, techniques, and competitive and success factors. Therefore, while there is synergistic value to treating them as one FDMC cluster, it is also important to unpack the various components and understand the differences between them.

For purposes of this plan, we will speak of several main components, aspects, and factors in an effort to:

- Differentiate between the core business; shared areas (overlaps between the core business, home-grown, and digital adjacencies); and purely digital/tech-based areas and alternative platforms and formats
- Differentiate between technology R&D, platform development, and content development and production
- Define the cluster scope as not too broad, and not too narrow; both focus and critical mass potential are needed. Therefore, we recommend using a three-stage definition:
 - **Primary:** Film, TV, and other moving-image media, and associated technologies, forms, and platforms, including interactive, web-based, and mobile applications

² <http://www.wired.com/wired/archive/12.10/tail.html>

- **Secondary:** All other digital and conventional media fields, *to the extent they relate to the primary cluster*. For example:
 - Music: strongly connected by virtue of scoring for film, TV, games, etc.
 - Graphics: loosely connected, if at all
 - Visualization: somewhat connected as support for visual effects (VFX) and animation
- **Tertiary:** separate and viable business sectors with high potential, e.g., visualization/simulation/modeling as a discrete field of endeavor

This reflects the central importance of the core business to the current regional media economy, as discussed in more detail below.

Cluster Components

Within the primary category (above), additional delineation is needed. The major areas to consider are:

- Film, TV, and other media content areas:
 - Production
 - Post-production:
 - Post-production editing, sound, mixing, etc.
 - Computer Generated Imagery (CGI)
 - Visual Effects (VFX)
 - Animation
- Digital Media (content and applications):
 - Games
 - Mobile applications
 - Web-based and interactive formats
 - Full dome and other alternate/immersive environments
- Media Technology (hardware and software):
 - Visualization, simulation, modeling
 - Immersive environments software platforms
 - Other computation-mediated tools and techniques

The Value Network

The FDMC media industries under consideration in this plan are structured differently than most conventional industries, and are also undergoing profound shifts. Moreover, NM's media industries are uniquely structured by virtue of the influence of the State

incentives program, the work of the Film Office, and the implementation of the MISP plan.

In general terms, it is more useful to conceptualize the NM industry in terms of a “value network,” as opposed to a more conventional “value chain” analysis used in the other REDI cluster plans. As cited in a case study of the Toronto media industry cluster:

“...this new media cluster is about a talent pool of free-lance workers, and value is produced around a project-based work schedule, and a free flow of talent to supply these projects. This has implications for attracting and retaining (and training) young people, transportation issues, economic infrastructure, etc.”³

General Value Network Assessment

The overriding factor in assessing the regional media industries is that they are dominated by the core business, which accounts for virtually all of the economic, business, and employment activity in the domain. The core business is, in turn, driven largely by the State incentives program, in particular the 25% tax rebate; and supported by the availability of professional caliber crew via IATSE Local 480, and the effectiveness of the Film Office.

This mirrors the structure of the statewide industries. Therefore, in broad strokes, the opportunities for the REDI region are the same as those recommended in the MISP and County plans:

- Protect and expand the core business, in this case with special attention to capitalizing on Santa Fe’s status as one of two main production centers in NM (along with Albuquerque) to create more opportunities in the rural areas
- Develop a homegrown, NM independent production sector for film, TV, and other formats
- Develop a technology-based capacity for new platforms, environments, and applications that can drive an entrepreneurial sector and support homegrown production

We wish to reemphasize the central strategic point made in the MISP plan: it will be extremely important to diversify into areas that are not so wholly dependent on the State rebate incentive, in order to create a truly sustainable industry in the region. *The challenge will be to achieve that goal while simultaneously protecting and growing the core business.*

Assets & Resources

There is a significant amount of physical and programmatic infrastructure in place already (primarily oriented toward workforce and professional development) for a region this thinly populated and with a small economic base, largely as a consequence of the MISP Plan’s implementation and funding. This includes the core business, workforce training, digital media instruction, and internships; and more generally, entrepreneurial

³ Source: REDI Technology Cluster Strategy

support, technology depth, facilities, expertise, awareness, and other assets (see sections on Facilities & Infrastructure, and Partners, below).

However, due to the nature of the core business (which dominates the overall economic scope of the regional media industries), there is relatively little “business infrastructure” and business assets in place, beyond what’s needed to service visiting film and TV productions, either exclusively (e.g., grip and lighting companies), or partially as an adjunct to their main business (e.g., car rental companies). This is especially true outside of Santa Fe, where almost no business infrastructure exists.

On an individual basis, the vast majority of people involved with these industries are film crew, employed by visiting productions on a project basis. Given that NM has arrived at a fairly steady level of core business production, demand for crew has probably stabilized, except for regular churn and replacement needs. Both SFCC and NNMC (El Rito) have Film Technician Training Programs (FTTP) to meet these needs.

Santa Fe Studios will add to the facilities stock, along with Garson Studios, and there are rudimentary post-production assets in place (see fuller discussion under Facilities & Infrastructure, and Post-Production, below).

The cluster participant inventory prepared by REDI, along with an assessment of Santa Fe County-centric resources prepared for the County plan can be found in the Appendices. These analyses show that almost all of the significant economic activity is dedicated to the core business, and located in the Santa Fe area, as noted above. Certain gaps exist in the core business support sector, and some businesses could be developed outside of the Santa Fe center if more production can be brought to the other parts of the region.

The Opportunity

It will be very important to manage expectations as to what can feasibly be achieved. In our opinion:

- The Core Business is not likely to expand by large numbers of productions; incremental additions to the REDI region’s participation is the best to expect, with added impacts from localization and other enhancements
- Post-production extensions to the Core Business have major challenges, and may not be viable at any significant level; however, incremental additions, particularly in Santa Fe, are possible
- Independent production of narrative and documentary content is a potential bright spot, but the revenue, jobs, and economic impacts are relatively small from this type of activity, except in the rare event of a “hit” production
- Alternative and technology-based platforms and formats are a wide open field of opportunity; but again, only the rare “hit” produces significant economic results

Therefore, in sum, the expectations should be for incremental additions to the existing film and digital media economic base, with the potential for occasional outlier successes; and synergistic contributions to the overall technology and entrepreneurial sectors in the

region. On a longer-term basis, these developments could eventually give rise to media businesses growing or relocating here.

That said, there are meaningful (if not vast) opportunities in all three of the recommended areas, with some upside potential in the homegrown production and technology-based entrepreneurial sectors.⁴ The critical challenges going forward will be to:

- Support and grow these existing programs and initiatives
- Find synergistic connections between them
- Catalyze new alliances, projects, and businesses, and
- Add precisely targeted resources, programs, and infrastructure to yield greater value

⁴ The caveat here is the risk of diminishment or abolishment of the rebate, and the impact on the core business and related sectors; see Policy, below, for a fuller discussion.

Vision & Strategy

In light of the analysis and factors above, we recommend that the REDI region should endeavor to complement the crew- and support-based core business opportunities, with a *creative entrepreneur* vision, focus, and strategy.

This creative entrepreneurial vision should encourage, develop, and support small-scale “media entrepreneurs” of all kinds, including content producers, technology inventors, and small business founders across the full range of media formats, applications, and tools, ideally leading to a “cottage industry” of advanced media practice that also supports and is supported by the core business activity.

This should be based on the region’s attractiveness to creative people, the assets and resources available, and the access provided by digital technologies and new business models and industry structures to markets outside of NM. External markets will be needed, because the local market for media products, services, and content is too limited to sustain a viable industry with job growth potential.

Overall Strategy

As discussed above, emerging platforms and infrastructure are available to allow anyone to enter the evolving digital film and media markets at the level of the creative entrepreneur. See, for example, HitRECORD.org for collaboration, the iPhone/iPad app stores for distribution, and for financing, Kickstarter.org, and the new feature film production “Lemonade: Detroit” on which you can become a credited producer by buying one frame for a dollar.⁵

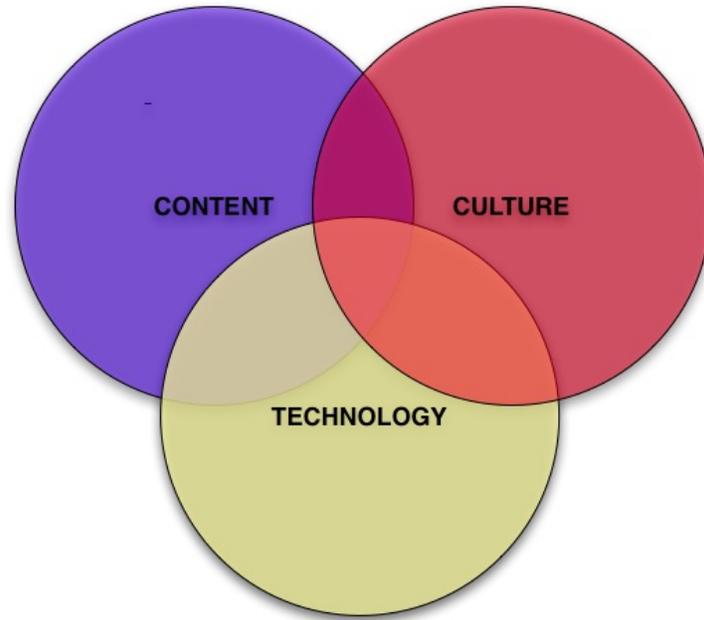
This disruptive context means near-frictionless access to the means of production and distribution for many types of media (although attracting an audience remains challenging), with a very low financial requirement for entry. The conventional value chain is becoming irrelevant, especially for non-core strategic opportunities. The crucial question then becomes: how do we take advantage of these trends to find an opportunity?

Differentiating Factors

From a competitive strategy standpoint, these disruptive factors mean that the REDI region has both enhanced access, and unlimited competition (because all other regions enjoy the same level of enhanced access). Therefore, a differentiating strategy that builds on sustainable strengths and resources native to the region will be critical.

We therefore propose that the REDI region’s sweet spot and value-added differentiation is at the convergence of Content, Culture, and Technology.

⁵ (<http://buyaframe.lemonadedetroit.com/>)



The tangible components of this regional strategy and plan should focus on what's needed to encourage and explore this content/culture/technology fusion in support of a creative entrepreneurial community.

Strengths & Resources

As a region, we have some significant infrastructure in place or in development:

- Telecommunications (via REDI Net, see below), and essential components of digital media production, collaboration, and distribution
- Entrepreneurial support programs (e.g., NNM Connect)
- Technology resources (e.g., Santa Fe Complex, NM Tech Council, REDI Technology Cluster plan)
- Education & training programs (e.g., SFCC, IAIA, NMHU, SFUAD, NNMC, Milagro)
- The core business activity and infrastructure

These are reviewed in detail below. In general terms, REDI will need to connect, engage, inspire, coordinate, and catalyze these existing programs and resources in support of the vision and strategy. Then, depending on the financial resources available to support this plan's implementation, additional programs and projects can be carefully added, remaining within the area of coordinating and catalyzing existing strengths.

Action Areas

In support of the creative entrepreneur vision and content/culture/technology strategy, we recommend these practical action areas to the extent funding is available:

- Extend and expand core business production and impacts to the full region as a central driver of the media economy
- Offer entrepreneurial support, connections to angels, VCs, mentors, and service providers addressing the specific needs of the media community and the particularities of these industries
- Support implementation of the County media plan, and build on its key concepts of an “Innovation-based Approach” to homegrown production, and “Empowering the Producer” as entrepreneur
- Connect and network the sectors, and form communities of interest and practice

All are discussed in greater detail below, with specific recommendations for actions. Other relevant areas to consider are:

Recruitment

One method for jump-starting the regional cluster’s growth (and connection to external markets) is to attract established creators, entrepreneurs, and small businesses working in the space (e.g., Red Earth VFX).⁶ We view this as secondary in importance to the grass roots entrepreneurial focus discussed above, but nevertheless recommend that a detailed plan be prepared in concert with the Renewable Energy/Green Industry and Technology clusters to address this source of growth. Elements to draw people and businesses to the region will or could include:

- The State rebate
- Life-style and ambience
- Subsidized access to advanced telecommunications (for consideration)
- Subsidized rent at the County Media District (for consideration)

If funding permits and SFUAD will cooperate, REDI should identify and reach out to College of Santa Fe Moving Image Arts alumni who have gone on to careers in Los Angeles, New York, and elsewhere, evaluate their level of professional achievement, and promote the opportunities available to them and their businesses in NM. Based on anecdotal evidence, many talented individuals and firms would welcome a way to relocate from the urban centers.

Media Technology and R&D

In order to develop viable commercial activity from new technology innovations, it will be important for the region to have at least a modest R&D function for new platforms, formats, and tools. This has already begun with the recent NSF Partnerships for Innovation grant for full-dome immersive environments, with SFX and IAIA participating. REDI should seek ways to connect digital media partners like these with regional research centers (e.g., LANL) to explore joint funding opportunities for R&D.

⁶ See “Case Studies,” below, for additional information

More generally, LANL could be an important resource in support of developing a technology component, and REDI needs to foster better connections to the Lab. Intellectual capital is most likely the key (existing IP is probably not directly useful, for the most part); recommendations for closer links in this regard appear below.

Exposure for Local Media Productions

Exposure is important for media creators, for whom an audience is often an essential component of the experience. This is especially true for students, aspirants, and early-stage professionals. REDI could work with the City and DCA on these ideas, among others:

- Local productions could air on Santa Fe Community TV, along with feature pieces on local media makers, technologists, etc.
- Culturally relevant material could support a Museum TV or micro-cinema network, utilizing the existing network of community museums and libraries

Online access to local productions will also be a valuable adjunct, and should be included in the design of the web platform (see Marketing & Communications, below).

Specific Sectors

This section addresses opportunities and recommended actions for each of the component sectors discussed above, in more detail.

Core Business

There are, essentially, two ways to grow the core business for the REDI region:

1. Attract more productions to the region
2. Derive greater value from those already shooting in Santa Fe or elsewhere in the region

The first will depend almost entirely on creating additional incentives specific to the region. This is discussed below, under Policy. Improved marketing could also help.

The second has two sub-components: first, substitute local businesses and service providers for out-of-state providers as much as possible (again, see Policy below); and second, find ways to cross-sell and up-sell productions coming to the region (including those focused on Garson and SFS) to use more regional locations while they are here, and thus businesses and services.

Localization efforts are low-hanging fruit and should be pursued immediately. SFA specializes in these types of activities, and has been awarded a grant by the City to begin working in the film industry in Santa Fe, in collaboration with the County, IA 480, and REDI, and this could serve as the foundation for expanded and regional efforts.

The cross-sell/up-sell technique also supports the Santa Fe central facilities and businesses by making the region more appealing and productive, and keeping shows here longer. Production expenditures are almost all day-based, so the longer a production remains in the region, the greater the economic impact. For example, regional efforts made the studio production “Cowboys & Aliens” more valuable to the entire area:

- The production used NNMC college for parking so as to stay within the 30-mile union drive zone (and also picked up some local business support in Espanola via the Rio Arriba film liaison) while location shooting Abiquiu
- The film also utilized space at Garson studios as a mill/shop to support its Abiquiu location work, and did “simul-post” (see Post-Production, below) there as well

Part and parcel with encouraging productions to shoot here, and stay longer, the FDMC must work to ensure “film-friendly” communities, and easy processes for permits, locations, etc. These are discussed in greater detail below, under the consideration of a Regional Film Liaison.

In addition, tribal reservation land has potential for activities that are difficult or impossible to do on federal/state land, e.g., pyrotechnics, explosives. Therefore, engaging the region’s Pueblos in the cluster effort could be advantageous to them and the broader community.

Promote Awareness

The vast majority of business owners throughout the region are probably not aware of the opportunities present in the film industry. Simply hosting public information events would be enormously helpful, with professionals and experts available to answer questions and explain how to access the opportunities.

By way of example, NMFO and the Albuquerque Hispano Chamber of Commerce are hosting such an event in November. As noted, Santa Fe Alliance has plans to do this with the Santa Fe community, and could extend the impact regionally (see Partners, below).

Develop “Film-Ready” Businesses

Regional businesses can make a more persuasive case if they are trained for, and held to, industry professional standards. REDI should work with local educational partners to offer businesses and professional service providers:

- Training for film industry processes, standards, and expectations
- Possibly a certification process for those completing training
- A feedback and correction loop to ensure compliance with standards

There is anecdotal evidence of occasional failures to maintain professional standards in the region. If true, and if left uncorrected, this will compromise any effort to grow the regional business.

In a related area, the idea of a “green film” program is discussed below (see Project & Program Ideas).

Facilities & Infrastructure

REDI should support Santa Fe Studios (SFS), the County Media District, Garson Studios, and in-town Santa Fe facilities development as needed (see fuller discussion, below). The base of professional caliber facilities and infrastructure available in Santa Fe is essential to luring productions there, and therefore to the possibility of broader regional activity.

Post Production

There has been considerable discussion throughout the NM film community about the potential for expanding the core business laterally into the general area of post-production. As noted above, this term is commonly used in these discussions to include traditional post-production processes (e.g., editing, sound, music), along with Visual Effects (VFX), Computer Generated Imagery (CGI), and animation.

The argument in support of this idea rests on several key factors:

- The State 25% rebate is applicable to post, creating a financial incentive
- Certain post-related processes can be done effectively in parallel with the production phase (i.e., “simul-post”), and so could be valuable to films already shooting here
- Digital technology makes it easy to transport film files, and even work in remote collaborative environments, given adequate infrastructure and security
- There is a small base of post-production businesses and professionals, centered largely in Albuquerque (e.g., Sony Imageworks, Red Earth VFX) and with some assets in Santa Fe (e.g., HDNM)

Numerous plans have been announced or considered for additional facilities. SFS plans to include post companies and facilities in its Phase 2 expansion. A proposal to convert the former Grand Illusion Cinema at College Plaza, “Core2,” is being developed; and editor Steve Perry has attempted to locate a facility at several sites, including the Railyard.

These factors must be evaluated in light of several potential challenges and hurdles, including:

- Key creatives on visiting productions (i.e., director, producer) need to return home as soon as possible after production, leaving only “simul-post” as a viable opportunity⁷
- For work components that can be done remotely, digital infrastructure enables truly low-cost centers (e.g., India, China) to perform the “back office” work at far lower prices than NM’s rebate can offer, as is already occurring.⁸
- Success in this business depends on prior relationships with clients, established film credits, and accomplishments (cf. Sony, Red Earth); it will be extremely difficult for new NM businesses to start in this sector with no record of achievement.

As a case in point, NM’s outstanding achievement in this area is arguably Cinnafilm (www.cinnafilm.com), an entrepreneurial startup launched by Lance Maurer and offering

⁷ To wit, the showrunner for a TV *series* shooting in NM was quoted in a workshop as saying he would “never” consider posting here.

⁸ For example, ILM and LucasFilm have a 400-person Singapore facility; see also *Variety* article on India’s emerging VFX sector: <http://www.variety.com/article/VR1118017347?refCatId=2866> and the NY Times on China’s animation sector: <http://www.nytimes.com/2010/11/08/business/media/08animate.html?nl=todaysheadlines&emc=tha25>

software-based advanced image processing techniques for the post-production industry, with a significant external market of leading media companies. The key point is that Cinnafilm's competitive distinction is based on software engineering, and is therefore a *technology play* in the media space (as opposed to a content or post-production services business). Lance is a software engineer by trade and training (with a personal affinity for film), having served many years in the aerospace and defense industries here, and this is another potential advantage for some parts of the REDI region in terms of human resources and skill base.

Recommendations

A thorough market assessment and competitive analysis are needed before resources are committed to developing a post-production industry based on the rebate, and with the expectation of reaching external markets.

For purposes of this plan, we recommend that REDI support the development of any facilities needed to encourage the homegrown and technology-based adjacencies. These facilities should be designed in such a way that they can also service visiting or out-of-state productions (and house recruited businesses), *should the demand materialize*, as a secondary consideration. Location should be determined by proximity to other businesses and facilities in the domain.

Simul-post is probably the most dependable (and least expensive) aspect of the services that could be offered to external markets, requiring only limited space and equipment;⁹ and it would be sensible to establish that first as a firm business foundation, on which other value-added services could then be extended, according to market demand. These extended services would utilize the skills and capacities being developed in support of the homegrown and technology adjacencies, and provide a platform to expose the work of local professionals to visiting productions while honing their skills in a higher-level environment.

This combination of skills, exposure, and working relationships could then provide the basis for developing a moderately sized post-production sector, with a comparative (if largely rebate-dependent) cost advantage over the primary U.S. centers, including VFX, CGI, and animation.

Digital Media & Technology

We group these two sectors as they have a great deal in common in terms of industry development. While there are also connections to the core business and homegrown production, these are not as strong or relevant.

Sector Definitions

Technology-based initiatives should be included in the digital media plan so long as there is a strong rich media content/culture component. Absent that, such initiatives belong with the Technology cluster, with which there will be much overlap (see below).

⁹ "Cowboys & Aliens," a major studio production, set up simul-post on an *ad hoc* basis with their own equipment at Garson Studios while location shooting in Abiquiu.

Digital Media refers to content, formats, and applications that are digital-native in their fundamental design and approach. This is to distinguish from what is commonly called digital cinema, or digital production and post-production techniques applied to conventional film and TV production. Categories include games and interactive; web-based applications; mobile applications; and immersive environments.

The intersection of these two sectors, under the content/culture/technology rubric, is probably the area of highest potential for the REDI region.

Project/Program Ideas

The digital media sector will benefit from the “grass-roots” or “creative entrepreneur” approach discussed above, more so than any other. This is where the increased access and reduced friction afforded by new technologies and distribution platforms is having its most profound effects, and can create opportunities for New Mexicans.

Specific program or project areas in which REDI could act, along with its implementation partners, to stimulate activity include:

- Scan cultural assets for a digital archive (see Projects, below)
- Create virtual sets for pre-visualization and animated environments (which will also support the core business by enhancing the region as a production location)
- As discussed in the County plan, forge connections between media makers (including independent film producers, thus supporting the home-grown sector) and technologists to identify and create low-cost tools and techniques for production and post-production

By stimulating large amounts of grass-roots activity of this type, there will be immediate benefits in creating a rich pool of experience and talent; second-order benefits in the event of very successful projects reaching external markets; and tertiary benefits by creating a fertile base for media businesses to eventually grow, or re-locate here.

Assets & Resources

There are two primary resource centers for digital media and technology in the region: Santa Fe Complex (SFX), and Los Alamos National Laboratory (LANL). CCT is interested in developing an R&D facility and capacity, but has not yet done so. Both SFX and LANL should be actively engaged in the cluster’s development.

At the current stage of evolution of the global industry, massive amounts of technology R&D is being done by mainstream media producers and VFX companies. There are two implications of this fact: first, the REDI region will need to adopt a niche strategy, rather than competing for mainstream innovations; and second, LANL probably has more to offer in the area of Intellectual Capital, as opposed to Intellectual Property (IP) *per se*.

While monitoring any potential LANL IP discoveries relevant to the media space (presumably in concert with the Tech Transfer Office), REDI’s primary energy should be directed at improving access to Lab Intellectual Capital. Ideas include:

- Market Lab capacities to the regional community:

- Identify the most motivated scientists, and encourage/support them in connecting to the community; help to resolve any conflict-of-interest concerns, etc.
 - Utilize those who live throughout the region for local outreach
 - Access those who are ready to retire, and give them a vehicle for rewarding activity and connections
- Cross-fertilization events:
 - Utilize the Frontiers in Science program to focus on this sector
 - Occasional face-to-face sessions with visualization/simulation leaders and media makers
 - Volunteer program to connect interested researchers with creators, entrepreneurs, filmmakers when “off-duty”

In collaboration with appropriate Lab staff, REDI should also explore the potential for “spin-in” business opportunities (i.e., mainstream VFX and CGI companies that can help the Lab with its vis/sim/mod capabilities). If this were to give rise to local support/service businesses in Los Alamos or elsewhere in the region, it would confer real benefits to the REDI cluster.

REDI Tech Cluster Plan

While relatively schematic in its design, the REDI Technology Cluster plan should be closely connected to the relevant aspects of the Film & Digital Media Cluster plan and its implementation. As lead agency, NMTC should be included (in the person of Eric Whitmore) in the core FDMC organizational structure for this reason, and may also play a direct role in the FDMC (see Implementation, below). Ideas for cooperative action on Tech Cluster recommendations or interests include:

- Ensure that digital media technology is integrated into the recommended tech commercialization grants, and other tech-specific programs
- Conduct a joint effort to promote the tech environment, including State incentives, resources
- Develop a mechanism to connect the coding/hacking community with the media content community (including film and TV: see discussion of County plan in the next section)

Home-Grown Production

In this sector, we recommend using the County film & digital media plan as the general paradigm, and build on it to create a foundation for the REDI region. The County plan is designed to leverage Santa Fe Studios, and its anticipated role in the core business, to develop a richer local industry focusing on independent and homegrown content production. Milagro can be a key contributor to this effort, drawing on its knowledge base in industry practices, above-the-line talent development, and cultural content with Native American and Hispanic media makers. Key points in the County plan are:

Empowering the Independent: an Innovation-based Model

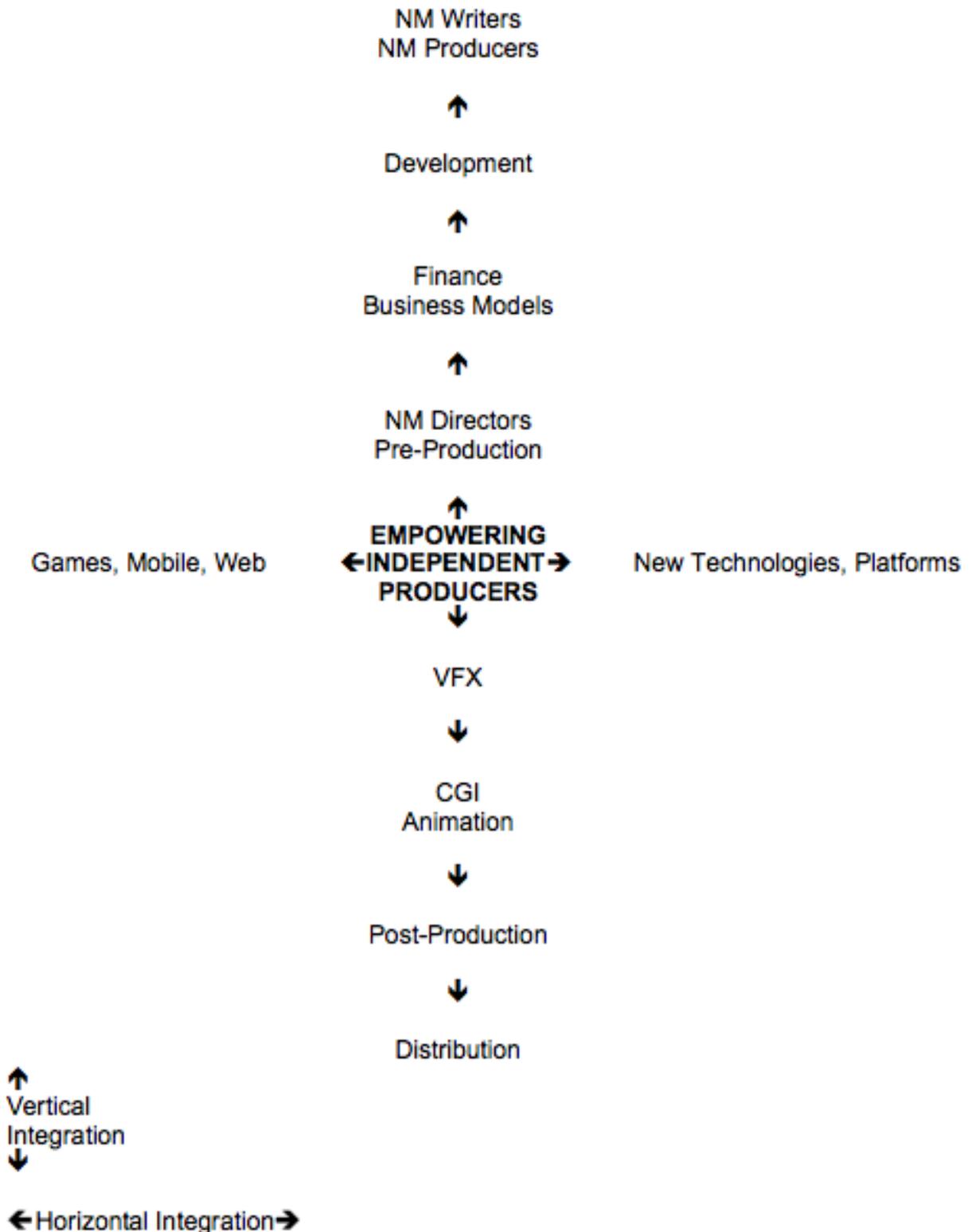
As a first order of business, the core business foundation must be protected and developed in support of hosting visiting films. Beyond that, as an overall cluster organizing principle, we propose a primary focus on independent (i.e., non-studio) feature film production, with an emphasis on mid- to low-budget levels extending down to the so-called micro-budget range, and the intent of developing a Santa Fe-based production community. This will allow close coordination and synergies with the core business and SFS, while opening up new areas and possibilities, to wit:

Santa Fe can effectively marshal its varied resources in support of *delivering more value for every production and distribution dollar* for the cost-conscious independent; and then leverage that capability and focus into other media formats, platforms, and technologies. We call this “Empowering the Independent.” The approach should be based on an innovation model, with a focus on developing new tools, techniques, processes, and business models for this sector. An opportunity exists to pioneer important, disruptive innovations, while the major studio incumbents are preoccupied with protecting their existing business model. This can and should also lead to the creation and growth of small businesses in the sector, a primary driver of job and economic growth in Santa Fe as elsewhere.

This independent focus can also be seen as a “Farm Team” strategy: lower budget productions will serve as training for crew development, and industry/cluster/technology development, in support of the core business; while the core business provides employment, training, and mentoring opportunities for independent and aspiring filmmakers. Each will benefit the other.

The graphic below shows the potential for using this independent producer focus as a means to extend the cluster into other vertically and horizontally integrated areas:

Expansion Pathways for the Independent Producer Strategy



Regional Expansion

REDI and the County and its partners can collaborate to extend the impact of this plan. The starting point is to support the County's efforts to implement the plan. Santa Fe Alliance is set to begin conducting some of the workshops recommended in that plan as implementation actions, and could concurrently work with REDI to extend its impact (see also Partners, below).

The priority is to develop mechanisms to provide access to production financing and distribution for local filmmakers. We believe these are feasible, given the (currently) available State and federal incentives, and emerging digital distribution platforms. Other ideas for supporting a local production community include:

- Create a system to give aspiring filmmakers honest feedback and criticism on their scripts, pitches, or projects; and connect the worthy ones to resources. This would be best implemented with one or more of the educational institutions working in the field.
- Develop a network to refer low-budget productions to affordable and *ad hoc* facilities, interns, equipment, etc.; and to help with special rates and deals at soundstages and professional service/equipment providers (utilizing excess capacity, down time, etc.). Garson has been active in the intern area, and also offers reduced pricing for independents; REDI should explore a cooperative relationship to expand these efforts, and connect them to the web-based community platform discussed below (see Marketing & Communications).
- Offer exposure (and if possible, small cash payments) to completed high quality productions via Santa Fe Community TV (SFCTV). The City and SFCC, as principle partners in operating and programming SFCTV, would be the natural REDI allies here. Distribution beyond Santa Fe's cable TV franchise to the full potential audience and region should be developed, featuring web-based access via the cluster's web platform (see Marketing, below).

Case Studies

Several short case studies follow, illustrating the most important types of content, approaches, and technology in the main sectors.

Core Business

- *Cowboys & Aliens*: this large-scale studio film shot locations in Abiquiu; through coordination and communication, the region also benefited by giving them a transportation base at NNMC, and shop-space and simul-post space at Garson, thereby picking up additional local spending in those areas.

Homegrown Production

- *Los Wildcats del Norte*: this is a feature film project, written and to be directed and produced by northern New Mexicans with extensive experience in the California industry, and to feature a local cast of actors and musicians. It tells the

story of Norteno music and the hard-knocks life of kids growing up in Espanola, and will be shot entirely on location.

- *Spoken Word*: this critically well-received film featured a northern NM-themed story, co-written by a native New Mexican, produced by Pojoaque-based Luminaria Productions, financed through Luminaria's multi-film production fund (www.spokenwordmovie.com). Luminaria was co-founded by an extremely accomplished line producer accustomed to working out of state on large studio projects.
- *Split Estate*: an Emmy award winning documentary (for Best Research) made by experienced northern New Mexican filmmakers, exploring the impact of natural gas "fracking" and mineral rights exploitation on private property owners throughout NM and the West (www.splitestate.com); this film received two New Visions grants from the NM Filmmakers Program.
- *Planet SnowKite*: a reality TV series produced entirely by Santa Feans, with a first episode shot on location in Argentina and others to be shot around the world, and with post-production in Santa Fe; intended for cable and satellite TV distribution. Many of the key personnel gained experience working on core production films and independent offshoots, illustrating the collateral benefits.

Digital Media

- *Cyphers*: a proposed webisode series developed and to be produced by local actors and filmmakers (<http://www.cyphers-episodes.com/>), it has successfully raised its initial funding via Kickstarter.
- *Peer Peer*: This iPad application by Santa Fe technologists Mick Thompson and Tyler White won first place and \$10,000 in an Alcatel-Lucent contest to develop an iPad app using the Alcatel-Lucent location based service API (<http://sfcomplex.org/category/press>).
- *Lucky 7/Origins of Life*: Two exceptional projects from Highlands interns via CCT: Lucky 7 was the web presence for SITE Santa Fe's 2008 Biennial of the same name (<http://www.santafelucky7.com/>), and the Origins of Life exhibit, initially developed for the Santa Fe Institute, will now be installed at the Museum of Science and Natural History in Albuquerque (<http://cct.newmexicoculture.org/emergence-a-new-view-of-lifes-origin1.html>).

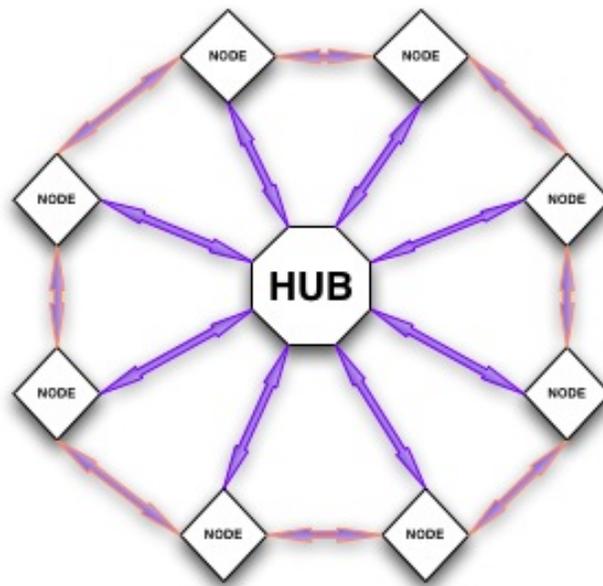
Technology

- *NSF Full-Dome Platform project*: Santa Fe Complex, IAIA, and UNM won a Partnerships for Innovation grant from the National Science Foundation to develop software platforms for full-dome and other immersive environments (<http://sfcomplex.org/2010/03/complex-awarded-nsf-grant>).
- *Cinnafilm*: Featuring a technology-based post-production software suite that offers numerous enhancements to digital media (<http://cinnafilm.com/>), this Albuquerque startup was created by a local software engineer and has succeeded in attracting a significant mainstream industry clientele.

It will be important for the cluster to promote success stories, as projects like these are completed, and to learn from the experiences; and also to work toward one major success that shows everyone what can be done here (see also Grand Challenge Concept, below). The community building and networking functions described below should make every effort to bring media-makers and inventors like these into close contact with students, aspirants, and early career creative entrepreneurs.

Organizational Structure

We recommend a “Hub-and-Spoke” architecture for developing the regional cluster, with Santa Fe as the main hub, local nodes at the edge, and proactive systems and resources to make it work throughout region. As discussed above, the north-central region already enjoys an extraordinarily large and diverse array of programs and institutions working in the film and digital media domain. The challenge will be to *support, coordinate, and leverage their existing and ongoing efforts*, with strategically targeted additional resources.

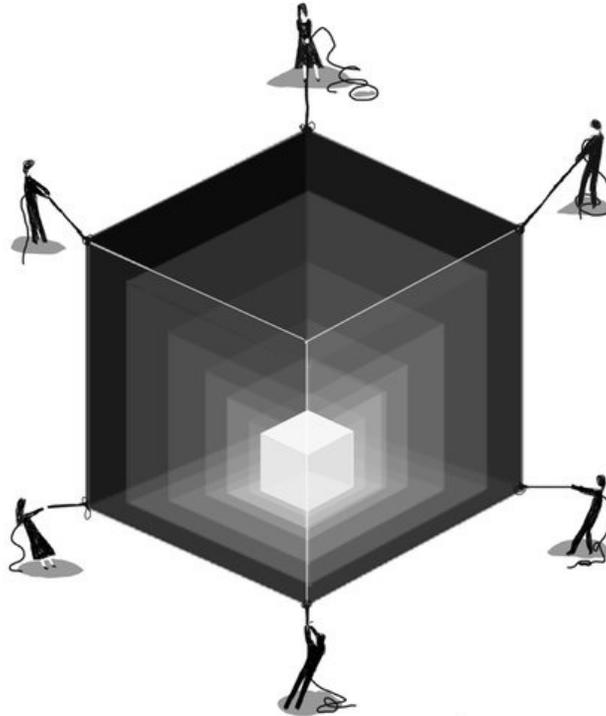


We believe that it is essential for the Santa Fe metro area (including Santa Fe Studios and the Media District) to achieve a level of critical mass that is recognized as a media production center, and that has all the necessary skills, personnel, and facilities to support the range of sectors discussed in this plan. Absent that critical mass (which can only be feasibly achieved in Santa Fe), the rest of the region will not be able to develop cluster-related activities.

This can be understood by analogy to the Hollywood film cluster center, or the Broadway theater center; these are clearly essential elements of their respective industries, and anyone interested in a certain level of achievement must aspire to go there. At the same time, independent cinema and regional theater play an important role and offer meaningful opportunities of their own to those wishing to work in these fields.

By analogy, the Santa Fe central hub will support, and be supported by, a rich network of activities, programs, and institutional alliances throughout the REDI region. Their interactions this will create a tapestry capable of supporting and lifting creative entrepreneurs and project teams to success.

This will require an unusual degree of cooperation in order to succeed. Each of the regional participants will need to understand that supporting Santa Fe's development as the cluster center will benefit them if properly structured, and they will need to act accordingly.



The Social Network

Given the entrepreneurial and project-based nature of the homegrown and digital media industry sectors, social infrastructure will be key to their development; therefore, building a regional social network in the media domain is the overall priority. We recommend these main steps:

Outreach and Engagement: REDI and its implementation partners should communicate the opportunities in these areas widely, and conduct targeted outreach to students and professionals in related domains. This should include secondary school students, via potential partners such as Future Voices of NM (a project of the Lensic); Youth Media Project (which operates in Santa Fe, Espanola, and Pojoaque); Warehouse 21; Youth Development Initiative/Mi Voz; West Las Vegas High School media arts program; and the award-winning Pojoaque Valley High video project.

Emergent Communities of Interest and Practice: By providing events, a gathering place, and resources and support systems, REDI can catalyze the emergence of communities of interest in the media industries. With further support, these will evolve into communities of practice, which will in turn give rise to entrepreneurial activity and project team formation. Note that these community centers may not be the “obvious” institutional nodes, such as schools; each community of interest should be assessed, with due attention to where it

naturally congregates, its group culture, and the most comfortable place to provide these types of support and encouragement. Local educational and other institutional partners should help support activities in their local areas.

Specialized Expertise: In order to ensure that the advanced expertise resident in Santa Fe is available to the region, we recommend a system that provides for a qualified “Circuit Rider,” based in Santa Fe, to visit participating communities of practice on a regular basis. This should be complemented by a regular series of events in Santa Fe at advanced production and technology centers (e.g., Garson, SFX, SFS), actively publicized and geared to the interests of the full regional community, with assistance with transportation and logistics to enable large numbers of people to attend. In addition, telecommunications and remote collaboration should be used to link all network nodes (see Infrastructure, below)

Operating Structure

As part of the implementation of this plan, REDI should organize a Coordinating Council of key cluster stakeholders and participants (see Partners, below). This Council should meet regularly to provide close coordination between:

- Regional and Santa Fe core business facilities and services, specific productions, and general opportunities
- NMFO and regional liaisons, database, activities (see below)
- Filmmaking, digital media making, and media technology communities, and Santa Fe and regional communities of interest
- The four REDI clusters, to identify opportunities for joint action and mutual benefit. This is likely best accomplished via the implementation leads for each cluster (e.g., SFBI, NMTC).

Regional Film Practices & Liaison

The core business has a far more centralized structure, relying on a high degree of persistent support and relevant expertise for visiting productions. This support system has NMFO at its center, working in collaboration with local and regional liaisons. The current REDI region network is as follows:

- Las Vegas has a City staff member assigned to serve part-time as film liaison; the City has become a popular filming location
- Los Alamos has a county staff marketing specialist covering film, but her time is limited and the county would benefit from more coverage/focus.
- Rio Arriba is covered by Mateo Pumphrey at NNMC with very scarce time and no financial resources
- Taos is covered by two contractors, John and Leah Slator, who also do location work (this can create conflicts of time and interest)
- City of Santa Fe has a liaison paid by the Convention and Visitors Bureau, who also does craft services work on films

- Santa Fe City and County also receive a lot of coverage from the NMFO, by virtue of that office’s presence in Santa Fe, and staff’s familiarity with the area.

As is evident from this brief recital, the region is covered by a patchwork of State, city, and county entities, with insufficient coordination if the opportunities for business development discussed above are to be realized.

A Regional Liaison?

The simplest, and possibly best solution to this challenge is to create and fund a regional film liaison. While there is strong support for this concept in its most general form, there are issues in the details. Funding is also a question. A discussion of issues and ideas follows.

- There is some question as to whether or not a full-time liaison is justified. However, as in Lincoln County (and to some extent Albuquerque), a regional representative could also be the home-grown and digital media ombudsman, assist with business film preparedness training, and serve as general coordinator for the REDI FDMC, if funding is available on a committed and consistent basis (i.e., what happens to the position during a dry period with no films shooting here?).
- A regional liaison could also assist with Pueblo engagement, which has been spotty, and help mitigate the problem with annual tribal government changes by providing continuity of contact
- There is substantial disagreement as to the optimal geographic scope (e.g., should Santa Fe County be grouped with the City?), and concern about the potential for conflict between participating counties and municipalities.

We recommend that these issues be further explored among the direct stakeholders, with a thorough cost/benefit analysis, as part of the cluster plan’s implementation. Whatever the outcome of that analysis, there is consensus that at minimum, the region would benefit from:

- Better coordination/consistency in permitting, ordinances, policies, procedures (ideally, a uniform set of regulations and practices, and/or a consistent “Guidelines for Location Shooting”)
 - City of Santa Fe has this very well developed; Santa Fe and Rio Arriba Counties have their own film ordinances
- Locations and assets inventory, including free-use structures, rare assets, a photo database, etc.
 - Must coordinate with, and link to NMFO website
- Central promotional website with a consistent look-and-feel for the region (again, must be coordinated with and linked to NMFO)
- A “film-friendly” communities program to ensure good support:
 - Enlist county/city councils and agencies for traffic control, trash, etc.
 - Ensure adequate police, security, etc.; enlist retired or off-duty workers if needed and possible

- Inform neighborhoods of location shoots, and impact
- Educate citizens about the industry and its benefits for their communities
- In the absence of a regional liaison, an alliance of county/city liaisons for closer coordination (see Lincoln County collaborative model)

NMFO has offered to convene a meeting with the region’s various liaisons (the office hosts an annual meeting of all NM liaisons, and also maintains an informal communications network year-round).

Partners/Nodes

A list of potential institutional partners in the FDMC network follows, in alphabetical order, with salient information on their most relevant programs, projects, and interests.

Center for Contemporary Arts (Santa Fe):

- CCA is currently doing outreach to Native American communities, citizen investigative journalism, environmental exposes and documentaries
- CCA considers the entire four-corners area as its region, and keen to support REDI; can make equipment, facilities, and expertise available to compatible programs, and travel to other venues (e.g., Milagro)

Center for Cultural Technology (Las Vegas):

- Plans are underway to renovate the historic Trolley Barn facility as a digital media center, but funding is as yet uncertain
- The NMHU Media Arts Program may combine with the Business School, offering exactly the type of entrepreneurial focus for students recommended in this plan¹⁰; CCT already offers the only masters degree in digital media in NM
- CCT has a group of fully- or partly-funded Americorps interns, some of whom might be able to support mutually beneficial projects with REDI. For example, they might be part of the “Circuit Rider” network, visiting other regional hubs; and/or, they could support project-related work, e.g. the Centennial Grand Challenge (see below)
- REDI could work with CCT to utilize DCA’s network in region, including community museums, libraries, and the Los Luceros property
- A better transportation link for students connecting Las Vegas to Santa Fe will be needed to integrate CCT’s important facilities and programs into the REDI network, and should be explored

¹⁰ Note that NYU now offers an MFA/MBA three-year joint program between its film and business schools, now set to graduate its first class

Garson Studios

- Garson hosts visiting productions while allowing SFUAD students direct access to these professional level activities, and also offers an informal intern referral service for local and independent productions; during slow periods, the studio will make deals with independents for affordable rates

Institute for American Indian Arts:

- IAIA's New Media Arts program has its mission: "using technology to build community"
- The program draws students from throughout REDI region, and IAIA is interested in collaborating with REDI on a regional basis
- IAIA would benefit from increased science support from Labs, Universities, and computer science training as part of its digital media capacity
- There is a strong emphasis on full-dome applications and content (a large, reconfigurable dome has been installed), and mobile applications

Los Alamos National Laboratory:

- As the primary sponsor of NNM Connect and the Los Alamos Venture Acceleration Fund (VAF), LANL is an important member of the network
- REDI should seek improved access to intellectual capital in relevant technical fields

Milagro at Los Luceros:

- Milagro seeks to be a showcase for sustainability practices, traditional agriculture, local economic impact/development, and media storytelling; with an emphasis on the role of art as an economic driver and revitalizing work as a value
 - Immediate, local economic impact from Los Luceros-based programs and events includes caterers, restaurants, services in the valley, etc.
 - Regional projects are mission-consistent if they can scale state-wide
- Above-the-line professional training is a key focus: writing, acting, producing, directing; Milagro also has strong connections to NNMC and its media programs
- Milagro's Oral Histories Program could become part of a Grand Challenge project, either in addition to, or as part of the Centennial idea and/or the cultural asset digitalization project (see below)
- The range of Milagro's programmatic interests and goals could offer collaborative potential across all four REDI clusters

NM Alliance for Digital Media:

- This is a nascent effort to work with NMCAC, the gateway system, and Statewide associations, organizations, and private sector players to promote this industry

segment. NMTC is involved, and REDI should engage on behalf of the Northern NM region/industry, and possibly host a northern region meeting

NM Film Office

- NMFO is at the heart of all core business activities, and via its NM Filmmakers program, New Visions Awards, and partnership in Milagro, is also active in the adjacent areas and can support the REDI agenda; coordination is essential

NM Post Alliance:

- This private non-profit industry association is in its formative stages; it is affiliated with NMTC, and has committed to a certain number of Santa Fe events, in addition to a state-wide industry event
- NMPA could be a useful professional education partner, and to help engage regional post-production businesses and professionals in REDI; it's legislative activities can complement REDI's policy initiatives (see below)

NM Tech Council:

- NMTC is the central implementation partner in REDI's technology cluster plan, and has substantial expertise in the media technology domain
- The Tech Council is seeking to establish a stronger northern NM chapter, and welcomes increased interactions with REDI
- Many of the recommendations in this plan are consistent with the REDI technology cluster implementation scope, and could even be combined in some respects

Northern NM College

- NNMC offers a range of digital media courses in Espanola and El Rito, via distance education at various local schools, and a Film Technicians Training Program at its El Rito campus; over 100 students are enrolled in film and media classes, with 17 of those majors.
- The head of media studies serves as Rio Arriba film liaison, and has an energetic agenda for local content and production along with core business development

Santa Fe Alliance:

- While a Santa Fe-based membership association, SFA is very keen to reach out and work regionally; the Alliance already serves as the southwest regional hub for BALLE, and is working state-wide with New Energy Economy on green chambers of commerce
- SFA has recently been awarded City funding to offer businesses a film preparedness training, in association with IA 480 and others; this could provide the basis for the regional training recommended above

- SFA is eager to support the REDI policy recommendations with their lobbying capacity
- The Alliance is also starting a green film program, which (together with its Food and Fuels and Farm to Restaurant programs) could provide the basis for the recommended regional green film program
- SFA specializes in networking, and community and relationship building, and could also support REDI's work in developing the regional cluster social and value network discussed above

Santa Fe Community College:

- SFCC hosts the original Film Technicians Training Program, and is developing a NM Film Resource project that unites all of its relevant programs and resources, including the Small Business Development Center there
- The college also offers a broad range of digital media production and post-production courses, concentrations, and degree programs
- SFCC's relationship with SFS (see below) is intended to give students access to professional equipment and facilities for training, while providing interns to SFS-based productions.
- SFCC get numerous requests for students to work on non-profit videos and documentaries; it will explore creating its own fund to support such projects via the Grow Foundation, and could provide broader regional opportunities
- SFCC could export its program, and/or utilize blended live/online delivery, to other schools (e.g., Taos, Los Alamos) if not competitive with NNMC. They are currently the NM coordinator for distributed STEM education, and have experience in this area.

Santa Fe Complex:

- As a community economic development initiative focused on the intersection of art, science, and technology, SFX is well poised to serve as a regional technology hub and is interested in a wider regional impact
- SFX hosts a nascent documentary film interest group, and events in conjunction with CCT and SFA
- The Complex is also doing advanced work in immersive and full-dome environments, and is partnered with IAIA and UNM on the full-dome PFI grant discussed above

Santa Fe Studios:

- The Phase 2 plans for SFS include post-production facilities/providers to be located on site
- SFS is eager to collaborate regionally and offer training and intern opportunities, both in partnership with SFCC, CCT, NNMC, and SFUAD, and eventually on its own. Note that in addition to the work hours requirement SFS has in its agreement

with the County, reference is made to “workforce development, including apprenticeships or other job training and career advancement programs” in the County Project Participation Agreement

Santa Fe University of Art and Design

- SFUAD is still in the early stages of its redevelopment under Laureate’s management, and is interested in engaging with the broader community and participating in economic development. It offers the only above-the-line oriented program in NM and offers access to Garson Studios and visiting productions.
- Various departments are making an effort to collaborate, e.g., graphics could work with film for VFX, music plans to work with film on music-for-film, etc.; this could create valuable opportunities. The Documentary Studies program has been reactivated, and can play an important role in cultural content and techniques.
- REDI could work with SFUAD to communicate the University’s openness and availability to the region, hosting open-house type events, cross-promotion of activities, etc.
- SFUAD might be able to increase its current film internship activities, and even expand beyond students (who are not always available as needed) in partnership with REDI. Union cooperation will be needed.

Taos Center for the Arts:

- The center received \$100,000 in State funding to install simulcast capability; it might be feasible to use this as communications/telepresence hub for the Taos area, or a media community support center

Other Potential Partners:

- UNM Taos and Los Alamos
- Rio Grande SIGGRAPH chapter
- National Association of Latino Independent Producers (workshops held in Santa Fe)
- Santa Fe Film Festival
- Warehouse 21 media programs
- Youth Media Project
- City of Santa Fe (particularly with regard to its Future Economy Plan), Santa Fe County (film and digital media plan), and all other municipal and county governments in the region and beyond (e.g., Las Vegas, Albuquerque)

Enabling Factors

This section discusses a number of critical factors that will need to be addressed in order to advance the cluster's development.

Entrepreneurial Support

Both the homegrown and digital media sectors will rely on an entrepreneurial approach to business and job growth. It will therefore be critical to get prospective and active media-makers thinking of themselves as entrepreneurs, and deliver to them the information and support needed.

Fortunately, the region is also well endowed in this regard, with existing entrepreneurial support programs. These can offer the basis for more targeted media industry efforts. In particular:

- Northern NM Connect provides an array of important programs, including LANS VAF, Springboard, Market Intelligence, NMSBA, and LINK; Connect has access to industry specialists as needed, and can bring them into play in support of digital media and media technology entrepreneurs and ventures
- Both NMHU and SFCC are working toward integrating entrepreneurial development into their digital media curricula; such programs will be essential for inculcating an entrepreneurial attitude and approach within the community. CCT also anticipates applying for a NSF Partnerships for Innovation grant to support the development of creative entrepreneurs in cultural technologies.
- The Santa Fe Small Business Development Center and Creative Santa Fe's "Artist Bootcamp Workshops" could be adapted for and offered to media producers/entrepreneurs in association with REDI. Producers in particular need to learn to think in terms of business planning, writing plans, getting finance and distribution, assembling teams, etc. for both conventional and digital media projects
- REDI should also consider sponsoring business plan competitions for digital media businesses, and offering business maturation grants, possibly in conjunction with VAF

As a case in point, the experience of Imagine Education and its Ko's Journey project is illustrative: this NM serious games company successfully developed and brought to market this educational game, utilizing the existing entrepreneurial support infrastructure. It underscores the fact that we have significant support structures and resources in place, but may need to educate support providers in the special needs of this vertical and conduct outreach to connect aspiring media entrepreneurs with the providers.¹¹

¹¹ See article at <http://www.financenewmexico.org/articles/starting-or-growing-a-business/new-mexico-business-resources-aid-launch-of-educational-games-company/>

Facilities & Infrastructure

The two main factors bearing on facilities and infrastructure are to support the direct needs of industry participants (core visiting productions, home-grown productions, and digital media projects), and to support the hub-and-spoke connections linking the Santa Fe hub to the regional nodes.

Garson and SFS are complementary for core business purposes, and together should meet the region's requirements for soundstages for the foreseeable future. While Garson's stages are older and have size constraints, SFS's will be new and at the top end of the size scale. In addition, Garson is located in-town, and can support a metro cluster, and will cut advantageous deals for independents when space is available. This will eventually support the homegrown sector as well. As recommended in the County plan, one or both of these facilities needs to create a "Smart Studio," fully designed to support digital workflow and advanced processes.

SFS's Phase I plan calls for two 18,000 SF stages, connectable, with 40' clear ceilings; production offices; LEED certified design, wired for digital workflow; and with the expectation of lighting and camera equipment companies on site. As mentioned, Phase II calls for post-production entities/facilities. Its LEED-certified design and other sustainability objectives would support the green film program discussed below.

Post-production facilities are discussed separately in detail above, as part of the Post-Production sector section. Other facilities considerations are:

- SFX can serve as an important technology hub, but would need better connectivity to support telepresence, remote collaborations (see discussion of Infrastructure and the NMCAC gateway network, below)
- Creative Santa Fe is conducting an initial feasibility assessment for an arts and creativity center, with Artspace.
- SFUAD, in addition to Garson and The Screen, is now home to NMFO, and is interested in establishing a NMCAC gateway on campus. Further, the City and State plan to develop the Barracks area in the center of campus as an "innovation park," which would be the likely location for the Santa Fe Innovation Park's applied solutions laboratory and immersive visualization facility. This complex could also include an array of economic and community development organizations, including CCT's proposed R&D lab.
- IAIA's cutting-edge full-dome facility is available for rent for use by others
- CCA's digital media equipment and facilities are available to support outreach activities
- Los Alamos Research Park could be a venue for developing Lab-based digital media initiatives (cf. Worldscape); space is available in the existing building (and LA County can make economic development investments in projects with a high direct ROI).

Telecommunication & Collaboration Infrastructure

Because all digital media, with few exceptions, move via telecom infrastructure during production (“digital dailies”), post-production (“digital work flow”), and even distribution (all internet-based download and streaming services), this is critical infrastructure for all sectors in the REDI FDMC.

REDI Net

The REDI Net ARRA broadband grant presents an outstanding opportunity, with the caveat that the engineering design must support this type of industry and structure, including such factors as:

- Assessment of the benefit of a regional intra-net, or local loop, for work-flow (most likely useful for the Santa Fe area, and/or the Media District)
- Gigabit+ service at affordable rates to all facility hubs and network nodes
 - Los Luceros planning is important, both internal for the campus there, and to consider the potential impact on local area service and rates
- Digital dailies capability at adequate locations throughout the region, to support location filming by visiting productions

REDI Net’s schedule is to start February-April 2011, with two-thirds of funds to be expended in 24 months and the remainder within 36 months. As part of this assessment, the Windstream, La Jicarita, and US Cable ARRA grants should also be reviewed with an eye toward possible cooperation.

NMCAC Gateway Network

The NM Computer Applications Center (a State supercomputer based in Rio Rancho) supports a network of gateways (or access points) at educational institutions statewide. This network can be used for virtual instruction, demonstration, collaboration, and supercomputing resources. The first wave of gateways is in place, including SFCC and NNMC in the REDI region. The actual telecom connections to Rio Rancho are the responsibility of the gateway sites, so REDI Net is an important component of this discussion too.

NMCAC has clear potential, but in its current early stage of development, there are reports of issues with operations, logistics, interoperability, etc. For purposes of this plan, we have two recommendations:

1. A qualified technical assessment must be made to determine if NMCAC can support the cluster’s needs, or if another network architecture should be used; and what the implications are for REDI Net and other sources of connectivity
2. In any event, the Santa Fe central hub will need at least one well-equipped network node, with support expertise, at an in-town location, in addition to SFCC/SFS’s south side location. As noted above, SFUAD is interested in an NMCAC gateway, and advanced broadband to support Garson and pedagogy throughout campus. The proposed innovation park will have the same needs.

Workforce & Professional Development

With few exceptions, the region is more than adequately covered in the areas of workforce training and professional development, and the growth of programs at Milagro will enhance this capacity. Indeed, if (as discussed above) the core business has reached a plateau, we must pay close attention to how many people we continue to train in the FTTP below-the-line programs, and how re-purposable those skills are during dry periods.

The existing educational institutions and programs are the natural partners for REDI, as detailed under Partners, above. That said, there are chronic shortages of cash and resources, and REDI should seek to support these programs to the extent possible, while co-developing new initiatives of the type discussed throughout this plan and helping to procure funding.

One key area for growth and improvement is internship opportunities with professional productions, including film, TV, and digital media. And one important exception appears to be basic computer science and programming skills, for digital media technical-level work.

Our main recommendation in this workforce category is to establish an appropriate task force within the overall coordinating council, comprised of the educational institutions with industry advisors, to ensure adequate and appropriate training and development opportunities. The computer science and programming deficit should be addressed promptly, as it will inhibit the digital media sector's growth if left uncorrected.

We would also like to see a greater degree of cooperation and collaboration between the institutions, especially those with unique pedagogical approaches and resources, and efforts to make our full range of educational opportunities available throughout the region. REDI can play a meaningful role in initiating and supporting such conversations and interactions, and helping to find funding to support such activities (unfunded mandates should be avoided at all cost).

Policy & Incentives

The area of policy and advocacy may be the most important, or at least timely, for REDI's action plan. Because the existing core business rests on the rebate program, and is in large part the basis for expanding out into adjacent areas, much depends on this incentive for north-central NM and the entire State. *If the rebate is eliminated or substantially limited, the business and the opportunity to expand beyond it may be crippled.*

Efforts in the past few legislative sessions to eliminate the rebate have failed, but in the current political and economic climate, the risk remains. If a cap is imposed (as has been discussed) on the amount of rebate funds available in a given year, opinions vary on what the impact would be at different cap levels, but there is at minimum a risk of material damage to the business.

Therefore, a focused policy initiative is essential, with the goals of:

- Protecting the incentives

- Improving them to grow local and rural businesses
- Reacting to the potential for a cap

REDI should form a task force immediately, with a priority mandate to prepare for the next legislative session, comprised of all regional players with a role to play in strategy formation and advocacy, and in association with all Statewide groups and initiatives working on the challenge.

In particular, NMFO and IA 480 have deep experience with legislative matters. And a private sector group, the NM Entertainment Industry Digital Association, is forming for industry advocacy, which could serve as a central coordinator. Other potential collaborators include the NM Post Alliance, Motion Picture Association of NM, Association of Counties, Municipal League, and any other existing infrastructure for coordinating and maximizing impact. As noted, the Santa Fe Alliance is prepared to support any effort with its lobbying capacity.

Rural Strategies

In general, the political polarization that exists with regard to the incentives program has a fair amount to do with the perception that the program benefits the Rio Grande Corridor, and especially Santa Fe/Albuquerque, more than the rural areas. Therefore, REDI can help protect the overall State program by devising ways to push impact out into the rural areas, as discussed in this plan; and by advocating for the importance of the incentives to those rural areas. We recommend that this be the focus of the immediate REDI priority strategy, subject to coordination with NMFO, IA 480, and other key Statewide players.

The recent spate of Governor’s media fund allocations to colleges in the region should help to build a sustainable political base of support (e.g., \$100,000 to NNMCM, \$130,000 to IAIA, and \$100,000 to Taos Center for the Arts).

Beyond protecting the rebate in its current form, the task force should prepare to react to attempts to cap it. One possibility is to seek *exemptions* from caps for rural areas, and for homegrown productions, for which we offer the following caveats and thoughts:

- There are major logistical challenges to tracking rural expenses for productions that shoot in both urban and rural areas; development of any such proposal must be closely coordinated with NMFO to make sure this is feasible from an administrative perspective
- The proximity of SFS, Garson, and the Santa Fe hub to REDI rural areas makes this an especially promising idea, if feasible, as it supports the core business strategy recommended in this plan
- This proposal can be justified as compensating for the increased cost of moving or housing Santa Fe or Albuquerque-based crew and equipment to rural locations

Additional Local Incentives

The policy task force should explore creating *extra* financial incentives, by means of the region’s counties’ gross receipts tax, or other tax, structure.

We also recommend a discussion with IA 480 to explore adjustments to drive zone restrictions, to enable the broader REDI area to participate without penalties for travel.

Other Policy Measures

Applicability of the rebate to various types of digital media and processes, games, etc. needs additional clarification. As above, it might be possible to create extra rural incentives in these areas.

Efforts should be made to correct the unfair advantage given to registered out-of-state service companies in the form of a 5% gross receipts tax, with which local companies can't compete. Similarly, Senator Wirth's efforts to require out-of-state corporations to do combined income reporting should be supported.

Finally, in support of any and all policy and advocacy efforts, REDI should work with its industry partners to catalyze and support a public information and communications campaign to educate voters on the nature and impact of the program (e.g., the two different NM film industry impact studies that have been conducted and the resulting confusion, and the extent of rural benefits).

Marketing & Communications

This will be an important component of the FDMC's development, for both internal and external needs. Branding, marketing, and communications are all important elements, and if funding permits, should be developed with professional support.

An overall brand and identity for the region covering all sectors (location filming, digital media, and technology) will support a marketing effort to bring films and talent here, and to make northern New Mexicans aware of the opportunities that exist in this industry. More generally, this can also support the policy communications task described above, to educate all voters about the benefits of this business and the incentive program.

A robust web platform should be at the core this effort. In addition to marketing the region to external audiences, the web platform can also provide practical information on resources, locations, assets, personnel, and procedures, and ultimately could also enable online permitting for location shooting, direct connections to vendors, etc. As noted above, these functions need to be developed in coordination with the NMFO website.

The platform will also support internal audiences (i.e., members of the industry cluster) and functions, which (in addition to the database of assets, resources, etc.) should include news, events, outreach, networking, and other cluster- and community-building efforts, and an easily accessible archive of content produced in the region.

The Santa Fe Alliance has substantial experience in developing and maintaining this type of community platform (<http://santafealliance.com/>) and is interested in supporting the FDMC's efforts as part of the implementation process (see below).

On a related point, "film tourism," or the marketing and promotion of locations used in NM filming to tourists, can be a material stimulus to visit, and should be included in the region's overall marketing efforts.

Project & Program Ideas

Actual hands-on project work, especially in the home-grown and digital media sectors, will be the single most valuable thing REDI can provide to the region's aspiring media makers. Some suggestions for enabling this follow.

Local Markets & Internships

While limited in terms of business and market development, local production opportunities can be used to drive experience and creativity and build the regional community of practice and network. Governments and businesses in the REDI region should be actively encouraged to utilize local media makers for their needs. Several programmatic opportunities or potentialities are also present and can be leveraged for broader impact in support of the strategy:

- CCT's content-based paid internship program: CCT, as part of its education and workforce development program, provides paid internships for students to work on relevant projects for museums, visitor and cultural centers, and other client organizations. This could be expanded to support REDI's economic development goals. CCT also has an Americorps grant that can be leveraged with matching funds to support these types of internships, an opportunity that REDI should explore, while seeking ways to couple these student interns with regional professionals.
- SFCC receives numerous requests from local non-profits and NGOs requesting interns and production support for short documentary and promotional pieces, often more than they can service internally. REDI could work with SFCC and other training programs to develop this conduit for student participation in professional productions, and to include aspiring media makers working outside the formal education and training system who wish to gain this type of experience. As above, linkages with established professionals in the region should be a part of this structure.
- SFUAD's Garson Studios receives many requests from independent, low-budget films for student interns, which Garson tries to meet with interested students, but can't always meet demand. REDI should explore a partnership to extend these opportunities to other aspiring filmmakers in the region. Note that IA 480 may have concerns about this, which would need to be addressed.
- REDI should also explore ways to proactively create local demand for local professionals and students. The Grand Challenge idea (see below) offers one means. Other ideas might include reaching out to local businesses, social, and public agencies to identify their film and digital media needs, and coupling potential clients with regional businesses and professionals.
- REDI should also work to use existing public sector planning projects to build visualization/simulation capacity, including immersive environments, and full-dome applications and content (IAIA and SFX would be ideal partners)

Integrate Related Sectors

A firm focus on the FDMC's strategy and objectives will be important. At the same time, the cluster will benefit from linkages to related industries and talent in the region that provide hands-on opportunities for engagement. Several viable examples follow.

Music for Film

REDI should seek ways to integrate local music and musicians, and other forms (with an emphasis on distinctive regional culture) that can be part of rich media production. The NMFO and NM Music Commission (<http://www.newmexicomusic.org/>) would be valuable partners (and potentially Milagro as well).

In addition, SFUAD is planning joint activities between the film and music programs to focus on music for film. This could be an excellent foundation; REDI should work with them to create a framework for engaging the broader music community in Northern NM, to connect those interested with filmmakers, composing, and media techniques.

Green Film Program

NMFO already supports a Green Filmmaking Program, with resources and guidelines for productions (<http://www.nmfilm.com/filming/green-filming/>). In cooperation with NMFO, REDI should explore the potential for a more robust program that can distinguish the region as the "greenest" place to shoot film. Note that this could integrate all four REDI clusters, as the following ideas and examples show:

- Farm-to-Film: locally sourced and organic food
 - Compost removal/drop-off program
- Renewable energy/fuels for sets and locations
 - Technology and entrepreneurial development for improved devices
- Sustainable expendables (sourcing, recycling, disposal)
- Develop criteria and certify businesses as green-film-ready

Santa Fe Alliance is developing ideas for its service area, and could expand the impact regionally in association with REDI.

Grand Challenge Concept

We recommend that, subject to resource availability, REDI use an immediate, tangible, region-wide project to drive implementation, assess results, raise cluster visibility, and improve regional processes and resources in support of the cluster.

This would also create a framework and process for growing the cluster's social, institutional, and value networks, as discussed above, by bringing its many elements into a collaborative context and activities, and engendering trust-based relationships. Ideas for such a project include:

NM Centennial: Media 360 (January 2012)

The approaching State Centennial celebration offers a unique opportunity for the culture/content/technology strategy to show its value and potential in a tangible form, with a potential audience of millions. As of this writing, it appears that media-related plans for the celebration are limited (<http://www.nmcentennial.org/>) and relatively conventional.

The REDI cluster could showcase its strengths, partners, skills, and resources, and above all its imagination, by creating a panoply of media tools and experiences featuring the culture/content/technology paradigm. Ideas include:

- Augmented reality tours using mobile devices
- Plaza projections (as developed by CCT)
- Crowd-source capture of local historical environments, features, landscapes, combined into a common “Virtual NM” platform for open use (could also support the core business as a pre-visualization tool for location shooting)
- Time Machine project: travel to historic NM via media technology

Depending on funding availability, this project could be structured in several ways, at mutually supporting levels:

- Open-source: stimulate large numbers of small experiments with minimum cash rewards/requirements
- Competition/merit-based accelerator: award moderate amounts of cash and technical support for further development to the best experiments
- Funded proposals: fund exceptional project proposals at a full professional level, including in-kind support from institutional partners, interns, etc.

In addition to the full range of institutional partners in the region, key collaborative opportunities include:

- Milagro’s Oral Histories Program
- NMTC’s City Apps project
- NM Office of the State Historian’s Digital History project

Digital Culture Archive

Strongly related to the Centennial concept, the NM Digital Culture Archive would be a virtual repository of State cultural assets. These include collections in the Museums of NM and other museums, and the full range of objects, forms, and experiences across cultures throughout the State.

There is the potential for third party funding, given the national importance of these cultural resources, which could make a large-scale project viable and employ significant numbers of students and professionals, especially in the rural areas. It may also be possible to structure this as a for-profit venture with a self-sustaining business model, by capitalizing on the commercial value of the digital assets.

As noted above, Milagro's Oral Histories Program might be a natural partner. CCT/DCA would also be a likely participant, starting with Museum of NM and State Archives, and they have given considerable thought to this type of project. CCT's Americorps interns would also be a good way to jumpstart the digitization process.

If the idea of a for-profit or self-sustaining enterprise is attractive, we would recommend conducting a business plan competition for NM entrepreneurs to design the best approach.

There is one significant technical caveat to this concept: digital formats are not as permanently archival as we generally believe, because formats, software, and hardware change so rapidly that the challenges of maintaining compatibility for large archives can become formidable.¹² A qualified task force should evaluate this issue before proceeding.

¹² See, for example, this article from PSFK consulting: <http://www.psfk.com/2010/10/the-fragility-of-digital-recordings.html>

Implementation

This implementation plan is based on the highest priority actions discussed in the full plan, and recommendations on the optimal partner institutions capable of managing the actual program and project implementations.

Implementation Partners

We recommend four key partner institutions for implementation, as follows:

- **Santa Fe Alliance:** Core business expansion and development, general community networking and events, marketing and communications
- **Santa Fe Complex:** Central hub for digital media and technology expertise, R&D, and programmatic content to develop these sectors
- **NM Tech Council:** As an adjunct to its scope with the REDI Technology Cluster, and in association with SFX, to conduct outreach and inreach, education, and region-wide support in the digital media and technology sectors
- **Center for Cultural Technology:** Central hub for cultural content, training, and applications, and Americorps interns as potential regional field workers

This is *not* a comprehensive list of relevant or important institutions. On the contrary, the active participation of the full complement of institutional partners discussed above will be essential to the success of this plan. Moreover, REDI must seek the broadest stakeholder/community engagement during the process to support implementation.

These four proposed partners are the most highly experienced in delivering the type of programs and services needed, they have capacity available in staff supervision and resources (to be supplemented by additional funding from, or in partnership with REDI, for project and program managers), and can therefore most effectively and rapidly launch the plan's implementation.

In addition, because of the high degree of interaction and interrelation between the various implementation components, we urge that the details of each partner's scope and activities be developed in conversation with all of them once the resource base is known, with an eye toward promoting the highest possible degree of collaboration. Key staff at all four institutions know each other well, and most have worked together before.

Priority Actions

Core Business

Policy

Action: Form a task force and conduct meetings to prepare and effect lobbying, communications, and advocacy to protect the rebate; ensure a qualified person leads the NMFO under the Martinez administration; and explore extra rural incentives.

Responsibility: REDI Project Manager and SFA, with all policy partners

Business Development

Action: Localization, business preparedness, information, and cross-selling and location coordinating activities; green film program development.

Responsibility: SFA, with local community partners

Market Development

Action: Form a task force to assess need for and feasibility of a regional film liaison.

Responsibility: REDI Project Manager, with NMFO and local film liaisons.

Home-Grown Production

Action: Act on key recommendations of County Plan, beginning with a finance experts group to develop access to these resources for local media-makers.

Responsibility: SFA, with County staff

Digital Media

Action: Form local communities of interest and practice throughout the region, and support them via expert outreach and inreach, from and to Santa Fe events and resources.

Responsibility: SFX, NMTC, CCT Americorps with local institutional partners

Action: Plan for telecommunications infrastructure as part of REDI Net

Responsibility: REDI Net project manager

Action: Grand Challenge project

Responsibility: NMTC, with all institutional program partners

Media Technology

Action: Connect technologists, researchers, and inventors with film and digital media content makers

Responsibility: NMTC and SFA, with Garson, IA 480, NMPA, NMFO

Action: Connect LANL-based intellectual capital with the cluster community

Responsibility: REDI program manager with RDC, NMTC

General

Action: Establish a coordinating council of all regional partners

Responsibility: REDI program manager

Action: General industry networking, communications/website, and community building

Responsibility: NMTC with SFA

Action: Enhance entrepreneurial support and culture across media sectors

Responsibility: REDI with RDC and NNM Connect, CCT via business school integration

Potential Resources Available

A detailed implementation plan will need to conform to the resources actually available, or that can be credibly pursued as part of implementation from third-party sources.

Possibilities as of this writing include:

- REDI: \$15,000 media cluster seed fund; possible EDA grant for all clusters, providing \$60,000-\$90,000 per cluster annually over two years
- City: \$15,000 grant to SFA for core business localization program, with REDI and Santa Fe County
- County: Possible economic development funds, bonding capacity for facilities and infrastructure
- Tax/Business Improvement District funding for facilities
- Industry participation (i.e., studio/TV partners, large local businesses)
- Governor's media fund: current balance unknown
- Joint funding and grant proposals to be developed by REDI with regional partners
- Existing programs that could be leveraged through collaborations, e.g.:
 - Northern NM Connect (seeking leverage partners), and the Venture Acceleration Fund
 - Milagro and NM Filmmakers Program (Milagro is seeking leverage collaborators), and the New Visions grant program
 - RDC Kellogg-funded Network Facilitation Initiative (Mora, San Miguel, Rio Arriba, and Taos counties, with expansion to Los Alamos expected)
 - CCT's Americorps intern program (needs matching funds)

Anticipated ROI

Only a general discussion of this cluster's potential impact and ROI can be offered here, due to the high degree of variability and uncertainty in the core business, and the extremely immature state and volatile environment for the digital and technology sectors.

Core Business

For purposes of core business impacts, we use historical Statewide levels as a basis. The aggregate Statewide level of production spending during the eight years (to date) of the Richardson administration was \$1.2 billion, to which the NMFO applies a 3x multiplier

for total economic impact of \$3.6 billion. Annual averages are therefore \$150 million direct, and \$450 million total impact.¹³

Economic breakouts by region are not available, but the Santa Fe and Albuquerque areas probably command the majority share, and house the vast majority of the union crew and dedicated support businesses and facilities.

If we assume the REDI region (including Santa Fe) captured 40 percent of the State-wide totals (or \$60 million average annual direct and \$180 million impact), then each incremental 10 percent increase in regional business by means of the full range of measures discussed in this plan would yield \$6 million annually in incremental direct regional spending, and \$18 million annually in impact using the 3x multiplier.

As an additional point of reference, see the Milken Institute report on the economic impact of the California film industry, included in the Appendices.

Other Sectors

All other sectors are a massive portfolio play, meaning that this plan is geared toward catalyzing as many projects as possible, in the hope that a very small number might become sufficiently successful to make a good return on the region's investment. This is a feasible outcome, but any attempt to quantify the odds or amounts would be specious.

As noted above, by creating a fertile base of experience and talent in these areas, there will be longer-term benefits and returns as businesses then grow or relocate here.

Subsequent Planning Needed

As discussed above, several areas will require additional assessment in order for REDI to contemplate actions in support, to wit:

Technical/engineering expert assessment on telecommunications and collaboration, including:

- NMCAC
- REDI Net
- Tele-collaboration architecture and equipment needs (including central hub facilities in Santa Fe, digital dailies, and digital work-flow)

Expert market research in the areas of:

- Demand for green services program
- Post-production opportunities

Santa Fe cluster community charrette for:

- Facilities needs, location, and development

¹³ See <http://www.nmfilm.com/filming/production-stats/index.php> for more statistics, and links to the Ernst & Young study of NM film industry impacts

Film liaisons task force for:

- Pro's and con's of a regional liaison
- Geographic scope for regional liaison
- Structure for enhanced coordination between local liaisons and NMFO

REDI Clusters leaders for:

- Recruitment strategy to bring businesses to the region

Appendices

Stakeholder Interviewees

REDI Cluster Inventory

Santa Fe County Resource Assessment

Films Shot in Region

Milagro at Los Luceros Activities

Milken Institute California Film Industry Report