May 2014

Exploring the Success of Low Power FM Radio Broadcasting within Native American Communities

Lily Nicole Kurtzman  
_Worcester Polytechnic Institute_

Megan Helene Bredes  
_Worcester Polytechnic Institute_

Michelle Joann Zayas  
_Worcester Polytechnic Institute_

Follow this and additional works at: https://digitalcommons.wpi.edu/iqp-all

Repository Citation  

This Unrestricted is brought to you for free and open access by the Interactive Qualifying Projects at Digital WPI. It has been accepted for inclusion in Interactive Qualifying Projects (All Years) by an authorized administrator of Digital WPI. For more information, please contact digitalwpi@wpi.edu.
Tribal Broadcasting

Exploring the Success of Low Power FM Radio Broadcasting within Native American Communities

An Interactive Qualifying Project Report
Submitted to the faculty of Worcester Polytechnic Institute in partial fulfillment of the requirements for the Degree of Bachelor of Science

Submitted by
Megan Bredes
Lily Kurtzman
Michelle Zayas

Project Advisors
Fabio Carrera
Lauren M. Mathews

Sponsor
Mark Ericson
Abstract

The goal of this project was to recommend strategies for the implementation of a Low Power FM (LPFM) radio station to facilitate communication in a Native American community. We conducted interviews with six tribal radio stations and two tribal radio programs, and separated the responses into three categories: logistics, financials, and topics. Further analysis of background research and transcriptions of interviews allowed us to successfully develop a template for a LPFM radio station in a Native American community. This template will aid in the creation of a LPFM radio station in a Native American community.
Executive Summary

Tribal broadcasting is growing more common throughout the United States, although some Native American communities maintain a traditional mindset and believe that using broadcasting to preserve certain aspects of culture is unorthodox. As communication technologies advance, Native Americans are becoming more accepting of the idea of utilizing broadcasting to enhance aspects of culture and raise awareness of Native issues. Currently, there are about 130 tribal radio stations within the United States. Broadcasting has the ability to aid these communities in discussing various challenges that Native Americans face, such as employment, education, health, and social issues. Spreading awareness to communities is extremely important in helping community members address these types of challenges. Lack of communication within communities can cause prominent issues to progress. An effective way to address these topics is to set up a low power FM radio station within the community.

The goal of this project was to recommend strategies for the implementation of a Low Power FM (LPFM) radio station to facilitate communication in a Native American community. This includes a brief analysis on full power FM radio, low power FM radio, internet broadcasting, and syndication to provide implementation equipment and cost and feasibility of each broadcasting option. We accomplished this goal by assessing existing tribal radio stations in the mid and southwest. We evaluated the current state of each radio station as far as personnel, financials, production topics, and startup processes.

First, we characterized the approaches used by radio stations in their Native American Communities. We interviewed six radio stations, two radio programs, and the Pueblo of Isleta, who is in the process of constructing their LPFM station. These questions were split into four categories: Startup, Personnel, Topics, and Logistics. Startup questions include all the information on initial investments or requirements of a radio station such as money requirements, the mission of the station, and how revenue is generated. The second category, personnel, includes specific questions on how many employees are needed to run a successful radio station and if volunteers are working for the radio station. The third category, topics, covered the station’s programming in order to discover what sorts of topics are discussed, how they are selected, how the station handles potentially controversial or offensive content, and the demographics of the station’s main audience. The last category, Logistics, included important information on how the radio station is run. We transcribed and separated the responses into three categories: Set-Up, Financials, and Logistics.

We also created a template for the successful implementation of a LPFM station in a Native American community. Based on our background research, we determined six phases that would make up our template:

- Identify a Pueblo
- Get Tribal Government Approval
- Find Source of Initial Funding
- Submit Application
- Develop Programming and Determine Start-Up Expenses
- Begin Construction

Each of these phases was then divided into subsections to describe the process in greater detail. These phases focused on how the process of creating a LPFM station on tribal land might differ from the
creation of a LPFM station in other communities. The transcriptions helped to fill in each of the template phases with specific steps that would help in the creation of a LPFM station in a Native American community.

Based on our research and interviews, our group has created the following recommendations:

- Start with Internet Broadcasting
- Produce a Syndicated Program
- Utilize our Template

The idea behind these recommendations is to allow for a progression from something simple and inexpensive to set up (Internet Broadcast) to a more complex and expensive set up (LPFM Station).
Acknowledgements

We would like to thank everyone who has helped make our project a success. We would like to thank our advisors, Lauren Mathews and Fabio Carrera for all their hard work and guidance from the beginning of the preparatory term to the end of the onsite term. We would like to thank our sponsor, Mark Ericson, for his commitment to our project and allowing us the opportunity to complete it. We would also like to give special thanks to the representatives at KUYI, KCIE, KGHR, KHAC, KILJ, KTDB, Native America Calling, NNOBS, and the Pueblo of Isleta for taking the time out of their incredibly busy schedules to answer our questions about their radio stations and programs.
Table of Contents

Abstract ........................................................................................................................................... ii

Executive Summary .......................................................................................................................... iii

Acknowledgements .......................................................................................................................... v

Table of Tables ................................................................................................................................ viii

Table of Figures ............................................................................................................................... viii

1. Introduction ................................................................................................................................... 9

2. Background .................................................................................................................................... 11
   2.1 Radio Broadcasting .................................................................................................................. 11
       2.1.1 Full Power Radio ........................................................................................................... 12
       2.1.2 Low power Radio ......................................................................................................... 12
       2.1.3 Internet Radio .............................................................................................................. 14
       2.1.5 Syndication ..................................................................................................................... 16
   2.2 Tribal Broadcasting .................................................................................................................. 16

3. Methodology .................................................................................................................................. 18
   3.1 Characterizing the approaches used by radio stations in their Native American communities...... 18
       3.1.1 Radio Station Interviews .............................................................................................. 19
       3.1.2 Radio Programs interviews .......................................................................................... 20
       3.1.3 Pueblo of Isleta Case Study ......................................................................................... 21
       3.1.4 Interview Response Analysis ....................................................................................... 22
   3.2 Creating a template for the successful implementation of a Low Power FM radio station in a Native American community ......................................................................................... 24

4. Results and Analysis ..................................................................................................................... 26
   4.1 Interview Responses and Analysis ........................................................................................... 26
       4.1.1 Radio Station Interview Responses and Analysis ............................................................ 27
       4.1.2 Syndicated Programs and Key Informants Interview Responses and Analysis .............. 29
   4.2 A template for the implementation of a Low Power FM radio station in a Native American community ......................................................................................................................... 31

5. Recommendations ......................................................................................................................... 36
   5.1 Start with Internet Broadcasting .............................................................................................. 36
   5.2 Produce a Syndicated Program ................................................................................................. 37
   5.3 Utilize Our Template ................................................................................................................ 38

6. Bibliography .................................................................................................................................. 39
7. Appendix ............................................................................................................................................. 42
   Appendix A: KUYI ................................................................................................................................. 42
   Appendix B: KCIE ................................................................................................................................. 46
   Appendix C: KGHR ............................................................................................................................ 50
   Appendix D: KHAC ............................................................................................................................. 51
   Appendix E: KILI ................................................................................................................................. 54
   Appendix F: KTDB ............................................................................................................................... 56
   Appendix G: Native America Calling ................................................................................................. 60
   Appendix H: NNOBS ........................................................................................................................... 64
   Appendix I: Pueblo of Isleta Part 1 ..................................................................................................... 68
   Appendix J: Pueblo of Isleta Part 2 ..................................................................................................... 71
Table of Tables

Table 1: Equipment for a LPFM station.................................................................................................................. 13
Table 2: Internet Radio Equipment List .................................................................................................................. 14
Table 3: Suggested Software..................................................................................................................................... 15
Table 4: List of Stations and their location and contact details.................................................................................... 19
Table 5: Sample Native American Radio Station Interview Questions ...................................................................... 20
Table 6: Sample Native American Program Interview Questions ................................................................................. 21
Table 7: Sample Questions for Isleta Pueblo ............................................................................................................. 22
Table 8: Empty Evaluation Matrix for Radio Interview Responses ................................................................................ 24
Table 9: List of Key Informants and their Contact Details ............................................................................................ 27
Table 10: Characteristics of Native American Radio Stations Results ........................................................................ 28
Table 11: Characteristics of Native American Programs and Informative Sources ...................................................... 30
Table 12: LPFM Equipment List.................................................................................................................................. 35

Table of Figures

Figure 1: Concentration of Tribal Radio Stations by State .......................................................................................... 17
Figure 2: Phases of LPFM Template .......................................................................................................................... 25
Figure 3: Key Informants and their Location ................................................................................................................ 26
Figure 4: Steps for Producing a Syndicated Program ................................................................................................ 37
Figure 5: Template Created for LPFM setup on Native American Land ....................................................................... 38
1. Introduction

Wireless networks and radio waves are unseen forces that create an extensive web of communication between people and their communities all around the world. Broadcasting, which uses these means of communication, is a prominent contributor to this web because it applies to many forms of media. Various broadcasting media includes radio broadcasting, internet broadcasting, and television. In the 1920’s, the introduction of radio broadcasting revolutionized communication. In history, radio broadcasting has transformed the lives of many while influencing the culture in which we surround ourselves, making news and entertainment readily accessible through the air. Currently, approximately 93% of Americans, age 12 and older, reported listening to AM/FM radio weekly, while about 50% rely on some form of internet broadcasting for local and national news and entertainment. Radio has not only proven to be a revolutionary form of communication in history, but it is still the most utilized form of broadcasting.

Currently there are 556 federally recognized Native American tribes in the United States. Out of 556, about 130 tribes have a radio station on their tribal land. While some Native American communities are hesitant to incorporate broadcasting technologies on their reservations in fear of unintentionally sharing cultural secrets, others find it beneficial for the preservation of culture and discussion of various local and national happenings. Broadcasting can aid these communities in discussing various challenges that Native Americans face, such as employment, education, health, and other social and cultural issues. Spreading awareness to communities is extremely important in helping community members to address these types of challenges. Some Native American communities are currently utilizing broadcasting media to address specific issues while educating and involving their community members. An effective way to start addressing these topics through the either is to set up a low power FM radio station within the community.

There are various tools that Native American communities can utilize to assist them in creating a low power FM radio. Prometheus Radio Project is a non-profit organization dedicated to building a community of Low Power FM radio stations. Founded in 1998, this project strives to allow people to fulfill their fullest potential in their communities by creating "a more just media system." Their website has all the information anyone could need on creating a LPFM station in a community, from the technology necessary, to a link to the application on the FCC website, to discussion boards where people can discuss their successes or problems.

For his doctoral research, our sponsor, Mr. Ericson, is working on a project to encourage communication on environmental and social issues in Native communities. He plans to use broadcasting as the main method of communication. For example, the Prometheus Radio Project provides all the information tribal communities will need for the technological side. Setting up a radio station on a

---

1 Santhanam, Mitchell, and Olmstead, “Audio.”
2 KABR, “Native Voice One: The Native American Radio Service.”
3 Appendix
5 Prometheus Radio Project, “Tech Support.”
6 Prometheus Radio Project, “Resources & Tools.”
7 Prometheus Radio Project, “Radiospark.”
Native American Pueblo can be more difficult, partly because of concerns over the dissemination of traditional customs outside the tribe. Unfortunately, there is no resource that provides information on how to get a LPFM station accepted by the Native American community.

The goal of this project was to recommend strategies for the implementation of a Low Power FM radio station to facilitate communication in a Native American community. To address this goal, we first contacted numerous existing radio stations, programs, and other organizations to interview them about the establishment, operation, and prospects for success for broadcasting stations on Tribal lands. These interviews allowed us to investigate what causes the success or failure of a station. Second, we synthesized this information with insight gained from the interviews we conducted with various radio stations to produce a template for how to start a successful Low Power FM radio station specifically in a Native American community.
2. Background

History has proven that communication is becoming a more prominent part of our lives. As technology advances there are new methods of communication that allow people to get up-to-date information on national and local current events. Currently, internet and smartphones have proven to heavily influence media in America. Census data indicates 75.9% of Americans over the age of 15 used either a smartphone or the Internet for news and entertainment. For the purposes of this project both conventional broadcasting (radio) and internet broadcasting (live streams, podcasts, etc.) will be considered as options. Every broadcasting option has a number of different tradeoffs. Internet broadcasting options have the ability to reach a broad audience, but they can also be password protected, therefore be restricted to a specific group of users. Conventional radio broadcasting can only reach people who are within the range of its signal, however people are more likely to listen to it without actively searching for a specific program or program type. Broadcasting technologies also provide a cultural connection through music and entertainment. Each different broadcasting technology has a history that shaped its growth as a media form. In the following sections, we discuss various methods for broadcasting and provide a general idea of how each option might be implemented. Broadcasting media has been helping Native communities around the world. Specifically in the United States, Native Americans are becoming more accepting of technologies used on their reservations. Broadcasting Media is opening many doors for Native communities to discuss Native issues.

2.1 Radio Broadcasting

Broadcasting is a prominent method people use to stay updated on everything from world news to local community happenings. The technology used in radio broadcasting was invented by Lee De Forest in 1908. It is primarily a one-way communication to a broad audience, providing information and entertainment to its listeners. Radio content can be quickly produced and may be sent by radio waves, cable, satellite or the internet. Despite the fact that there are now many alternative ways to obtain news and entertainment, 92% of Americans aged 12 and over listen to radio on a weekly basis. Currently radio stations make their money through different forms of advertisement. In 2012, radio stations made 16.5 billion dollars from advertising a year. The most successful of these different types of advertising is spot advertising, or the brief ads that are played during breaks in the radio show.

In the past century radio broadcasting has had a huge influence on our culture from the types of music people listen to, to who they vote for in an election. It was used to calm the American people during the Great Depression with President Franklin D. Roosevelt's "fireside chats". Perhaps one of the greatest examples of the power and influence of radio on culture was the famous "War of the Worlds" broadcast. Orson Welles rewrote his famous novel about an alien invasion as a fake news report and broadcast it all over the US. Though the broadcast included multiple explanations throughout that it was a fake broadcast intended for entertainment, some people who tuned in late only heard the part about an object crashing to earth and aliens emerging. People flooded the streets, prepared their guns, purchased bug out bags, etc.

---

8 U.S. Census Bureau, “Population Characteristics.”
10 Forest, “Space Telegraphy.”
11 Santhanam, Mitchell, and Olmstead, “Audio.”
12 Ibid.
hid in cellars, and tried to protect themselves from poison gas from Mars by wrapping their heads in wet towels, all because they heard a broadcast on the radio and thought it was real\textsuperscript{13}.

Radio survived the invention of television by becoming smaller and more portable. Radio could travel with people in a way that television could not, for example in automobiles, and now it is evolving to fit with a new era by moving to the internet, which eliminates the limitations of a broadcasting radius so anyone can have access\textsuperscript{14}.

2.1.1 Full Power Radio

Full power FM radio is what most people think of when talking about a radio station. These are large stations that need a relatively large number of personnel to be run, and consequently have large operating budgets. Full power stations broadcast at any range above 100 watts, which means they are capable of reaching incredibly large audiences. Stations of this variety run 24 hours, 7 days a week. Full power stations are typically commercially owned, for-profit stations, though there are many that are not. To support their very large operating budgets, they make a lot of money through advertising. In 2012, radio stations made 16.5 billion dollars from advertising a year. The different types of advertising that can be used are: spot advertising, digital advertising, and off-air advertising. The most successful of these different types of advertising is spot advertising, or the brief ads that are played during breaks in the radio show\textsuperscript{15}. A lot of Full power radio stations also have internet streaming options available on their websites. Despite what one might expect, given the success of internet broadcasting, the number of radio stations has continued to grow. Since the beginning of this year, 48 full power-broadcasting stations have been created in the United States\textsuperscript{16}.

2.1.2 Low power Radio

Low Power FM (LPFM) Radio is very similar to Full Power FM radio as far as the technical requirements go. A lot of the same equipment is required, but in the case of a LPFM station there is less power used for transmission. A LPFM station at most can have a transmission power of 100 watts\textsuperscript{17}. This means that their signal cannot reach as far as the signal of a conventional radio station. The other main difference between LPFM and FPFM is that the Federal Communications Commission (FCC) requires that a LPFM must belong to a nonprofit organization that is looking to educate their audience. The definition for education in this case is very loose\textsuperscript{18}.

The equipment requirements for a Low Power FM (LPFM) radio station are as follows.

\textsuperscript{13} Sanes, “War of the Worlds, Orson Welles, and the Invasion from Mars.”
\textsuperscript{14} Ruben, “Radio Activity.”
\textsuperscript{15} Santhanam, Mitchell, and Olmstead, “Audio.”
\textsuperscript{16} Riism and el, “Radio Continues To Grow in 2014.”
\textsuperscript{17} Federal Communications Commission, “Low Power FM Broadcast Radio Stations.”
\textsuperscript{18} Prometheus Radio Project, “Prometheus Radio Project.”
Table 1: Equipment for a LPFM station

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Function</th>
<th>Necessary?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amplifier</td>
<td>Used to amplify the output of an audio playing device</td>
<td>Yes</td>
</tr>
<tr>
<td>Microphones</td>
<td>Used to allow radio host to speak directly to the audience. Used to pick up the voices of people who the host might be interviewing or conversing with.</td>
<td>Yes</td>
</tr>
<tr>
<td>Microphone booms/stands</td>
<td>Used to support the microphones</td>
<td>Yes</td>
</tr>
<tr>
<td>Mixer</td>
<td>Used to increase the sound quality of microphones and other external sources of sound</td>
<td>Yes</td>
</tr>
<tr>
<td>EAS (Emergency Alert System)</td>
<td>Government Required Safety Equipment</td>
<td>Yes</td>
</tr>
<tr>
<td>FM monitor tuner</td>
<td>Used so that the radio host can tune into their own station and see how to broadcast sounds</td>
<td>Yes</td>
</tr>
<tr>
<td>Headphones</td>
<td>Used so that the radio host can monitor the audio quality</td>
<td>Yes</td>
</tr>
<tr>
<td>Wires, hardware, etc.</td>
<td>Used to connect all of the equipment</td>
<td>Yes</td>
</tr>
<tr>
<td>Audio processor/compressor/limiter</td>
<td>Used to ensure that the audio transmitted meets all the regulations placed on transmitted signals</td>
<td>Yes</td>
</tr>
<tr>
<td>Transmitter</td>
<td>Used to convert sound into something that can be received by people’s radios</td>
<td>Yes</td>
</tr>
<tr>
<td>Antenna</td>
<td>Used to send the signals produced by the transmitter out into the air</td>
<td>Yes</td>
</tr>
<tr>
<td>Mast</td>
<td>The location where the antenna is placed</td>
<td>Yes</td>
</tr>
<tr>
<td>Lightning arrester</td>
<td>Used to minimize damage caused by lightning striking the antenna</td>
<td>Yes</td>
</tr>
<tr>
<td>Computer</td>
<td>Used to record and potentially stream radio shows, play music, receive input from an online community, and/or automate programming</td>
<td>No, highly recommended</td>
</tr>
<tr>
<td>CD Players</td>
<td>Used to play music</td>
<td>No</td>
</tr>
<tr>
<td>Turntables</td>
<td>Used to play music</td>
<td>No</td>
</tr>
<tr>
<td>Monitor muting device</td>
<td>Used to mute the monitor microphones when someone speaks into the microphone</td>
<td>No</td>
</tr>
<tr>
<td>Monitor speakers</td>
<td>Used so that the radio host can monitor the audio quality</td>
<td>No</td>
</tr>
<tr>
<td>Single line speaker phone</td>
<td>Used to allow microphones to pick up callers voices</td>
<td>No</td>
</tr>
<tr>
<td>Telephone hybrid</td>
<td>Used to transmit caller’s voices over the air</td>
<td>No</td>
</tr>
</tbody>
</table>

For those concerned with quality or for larger setups, there is additional equipment that can be purchased to improve broadcast sound quality and help mitigate potential interference that might make the signal hard to receive.

In addition to the equipment that is required to start up a LPFM radio station, there is also a lengthy legal process. There is an application that needs to be submitted to the FCC to obtain permission to use a certain bandwidth for broadcasting. There are also a number of rules and regulations regarding what LPFM stations are allowed to transmit. Once permission to transmit has been obtained, depending on what the station plans on doing, rights to play music must be obtained, as well as potentially obtaining the rights to syndicated material that can be played, in addition to any content the owners of the station might produce themselves.

2.1.3 Internet Radio

As of 2012, 29% of people over the age of 12 claim to listen to online radio on a weekly basis. This is an increase from the 22% in the year 2011, and based on the trend shown from previous years, this number will only continue to grow. There are a number of different varieties of internet radio. In some cases it is just an extension of a standard radio broadcast while in others it can be its own show, with no accompanying radio broadcast. In some cases, for example Pandora.com, the music that is streamed is of the listener’s choosing from among a set selection and the website itself just inserts advertisements at regular intervals.

An Internet radio broadcast is a lot simpler to set up than conventional radio stations are. They require a lot less equipment to set up since they have no need for any of the equipment related to frequency-based transmission. The equipment suggested is listed in the following table.

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Function</th>
<th>Required?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer</td>
<td>Used to Produce the live stream. Used to view comments people might make on the stream.</td>
<td>Yes</td>
</tr>
<tr>
<td>Microphones</td>
<td>Used to allow radio host to speak directly to the audience.</td>
<td>Yes</td>
</tr>
<tr>
<td>Headphones</td>
<td>Used so that the radio host can monitor the audio quality of the stream.</td>
<td>Yes</td>
</tr>
<tr>
<td>Server</td>
<td>Used to host the live stream, and the website of the internet station.</td>
<td>No, highly recommended</td>
</tr>
<tr>
<td>Mixer</td>
<td>Used to increase the sound quality of microphones and other external sources of sound</td>
<td>No</td>
</tr>
<tr>
<td>Telephone Interface</td>
<td>Allows viewers to call into the station.</td>
<td>No</td>
</tr>
<tr>
<td>Mixer-Computer Interface</td>
<td>Used to connect the mixer to the computer. (Built in to some mixers)</td>
<td>No</td>
</tr>
</tbody>
</table>

Santhanam, Mitchell, and Olmstead, “Audio.”
Beebe, “Setting up an Internet Radio Station.”
In addition to the equipment requirements, there are also a number of software requirements. In the table below there are a number of suggested pieces of software that can be used to assist in running an internet radio station. These particular software options were suggested because they are all free software options that work together without too much difficulty.

Table 3: Suggested Software

<table>
<thead>
<tr>
<th>Suggested Software</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audacity</td>
<td>Used to prerecord interviews or audio for the internet radio stream</td>
</tr>
<tr>
<td>Winamp</td>
<td>Used to play and produce audio (music, prerecorded interviews, etc.) for the internet radio stream</td>
</tr>
<tr>
<td>Edcast</td>
<td>Winamp plugin that turns an mp3 file into a streamable file</td>
</tr>
<tr>
<td>Icecast2</td>
<td>Software used to stream audio over the internet</td>
</tr>
<tr>
<td>lame_enc.dll</td>
<td>Add-on to Winamp that turns files into mp3 files</td>
</tr>
</tbody>
</table>

Since it requires a lot less equipment, Internet radio can be seen as a simpler way of starting up a broadcasting station. Many current radio stations have added internet broadcasts, however internet broadcasts could also be used as an easy transitional step in the process of starting up a real radio station.

Since the birth of the internet in 1991, the internet has come to play an important role in the lives of many people, especially in the developed world. Among its other social influences, the internet has led to the development of a number of new broadcasting modalities, each of which has the potential to influence communities on both local and broad scales.

A podcast is a form of media that has become very popular with both amateur and professional broadcasters. Podcasts are generally audio computer files, though they can be a video as well. Either type is downloadable and can be played on iTunes or QuickTime, or transferred to another device or media (e.g. CD’s).

Podcasting was started in 2001 by Adam Curry and Dave Winer, but the name "podcasting" was not used until 2004. Internet radio had been around since 1993, and broadcasters soon began publishing their broadcasts online in a downloadable format. Curry and Winer created a show called Daily Source Code that was directed by developers from ipodder.com. The code was then improved upon, and many more podcasts were created. By July 2005, a Google search for "how to podcast" yielded over two million results and in 2006, 22% of Americans 12 or older knew what a podcast was. By 2012, that number more than doubled to 46%.

The equipment necessary for podcasting is pretty simple to acquire. The most basic of technologies that one would need are a computer, microphone, and some sort of recording software. The easiest recording software to use is Audacity, because it is free and extremely intuitive. For those who want to be professional, Adobe Audition is advanced software that allows for the highest quality recording. The choice between an audio and a video podcast depends on the broadcaster’s

---

22 Miller, “Start Your Own Internet Radio Station for Free.”
23 Ciccarell, “History of Podcasting.”
24 Santhanam, Mitchell, and Olmstead, “Audio.”
25 Ciccarell, “Podcast Technology.”
preference. After determining the type of podcast, a topic is selected. Podcasts are usually used to educate on a topic about which the broadcaster feels particularly knowledgeable. In order to build and maintain a strong listener base, a regular schedule needs to be put in place.

2.1.5 Syndication

Syndication is a technique used in broadcasting that allows a radio program to be sold to multiple radio stations and broadcasted at a specific time. Syndication facilitates broadcasting without the obligation of running a full time radio station. Since a program can be syndicated over multiple radio stations, the content of the program is heard by a larger audience. Syndication has opened doors to connect communities that share common attributes when they are not in close proximity.

Programs such as Native America Calling have been successful in connecting Native American communities all over the United States. Native America Calling is a daily, 1-hour program that plays on 60 radio stations, with a mission to promote a nationwide discussion about prominent challenges that Native Americans face. This unification strengthens the connection of Native Americans everywhere allowing them to see what problems are impacting their communities.

2.2 Tribal Broadcasting

Tribal broadcasting is growing more common throughout the United States. To make the technologies more accessible, the FCC established a Tribal Radio Priority grant in 2010. The goal of the priority was to expand the number of radio stations owned by Native American Tribes so they can broadcast to their respective tribal lands. This grant is intended to enlarge the number of tribally owned radio stations, providing radio services specific to tribal needs and cultures. According to Native Voice One, as of 2014 there are 130 tribal radio stations in the United States. As shown in Figure 1 most tribal radio stations are concentrated in Alaska, the Southwest and Midwest. Tribal broadcasting stations share the common goal of preserving the traditions and culture of their ancestors as well as communicating Native issues within tribal communities. Native Americans face a number of challenges, including, health, economic, and social issues. Native American broadcasts incorporate these challenges in their station or program to spread awareness to the whole community. To ease the effects of these issues, Native American broadcasts are giving a voice to the Native American people all over the United States. Whether it is a program or a station, each individual tribal broadcast adheres to its own tradition and culture.

---

26 Witting, “Welcome.”
27 Witting, “FAQ.”
28 Native American Calling, “Native American Calling: The National Electronic Talking Circle.”
29 Native Voice One, “Native Voice One.”
30 Blackwell, “Tribal Radio Priority.”
31 Native Voice One, “Native Voice One.”
32 Note: These tribal radios were analyzed on behalf of our sponsors recommendation.
Figure 1: Concentration of Tribal Radio Stations by State

33 Native Voice One, “Native Voice One.”
3. Methodology

The goal of this project was to recommend strategies for the implementation of a Low Power FM radio station to facilitate communication in a Native American community. To achieve this goal we came up with the following objectives:

- Characterize the approaches used by radio stations in their Native American communities.
- Create a template for the successful implementation of a Low Power FM radio station in a Native American community.

3.1 Characterizing the approaches used by radio stations in their Native American communities.

Our methods for this objective centered on key informant interviews. First, we created a list of radio contacts to call and interview. This list consisted of developed Native American radio stations and programs primarily in the Southwest and various helpful sources on the implementation of radio station on a reservation, as seen in Table 4. The list is sub-divided into three different sections: Native American radio stations, Native American radio programs, and other informative sources. Each contact was organized by location, tribe, contact information, and if the station has been successfully contacted. The Native American radio stations gave us insight into implementation and maintenance of radio stations on reservations. Native American programs gave us helpful information on topics of discussion and how to run a successful show. We also contacted the Federal Communications Commission, and tribes that applied for a low power FM radio station in New Mexico, but have not yet established a working station, to better understand the LPFM application process and station start up procedures.
### Table 4: List of Stations and their location and contact details

<table>
<thead>
<tr>
<th>Station</th>
<th>Tribe</th>
<th>State</th>
<th>Method of Contact</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>KUYI - FM 88.1</td>
<td>Hopi</td>
<td>Arizona</td>
<td>928-738-5530</td>
<td><a href="http://www.kuyi.net/">http://www.kuyi.net/</a></td>
</tr>
<tr>
<td>KILI - FM 90.1</td>
<td>Lakota</td>
<td>South Dakota</td>
<td>605-867-5002</td>
<td><a href="http://www.kiliradio.org/">http://www.kiliradio.org/</a></td>
</tr>
<tr>
<td>KSHI - FM 90.9</td>
<td>Zuni</td>
<td>New Mexico</td>
<td>505-782-4144 <a href="mailto:kshi909fm@gmail.com">kshi909fm@gmail.com</a></td>
<td>N/A</td>
</tr>
<tr>
<td>KABR - FM 107.5</td>
<td>Navajo</td>
<td>New Mexico</td>
<td>575-854-8632</td>
<td>N/A</td>
</tr>
<tr>
<td>KHAC – AM 800</td>
<td>Navajo</td>
<td>New Mexico</td>
<td>505-371-5587</td>
<td><a href="http://khac.westernindian.net/">http://khac.westernindian.net/</a></td>
</tr>
<tr>
<td>KCIE - FM 90.5</td>
<td>Jicarilla</td>
<td>New Mexico</td>
<td>575-759-3023</td>
<td><a href="http://www.kcieradio.com/">http://www.kcieradio.com/</a></td>
</tr>
<tr>
<td>KGHR - FM 91.5</td>
<td>Navajo</td>
<td>Arizona</td>
<td>928-283-6271</td>
<td><a href="http://www.kghr.net/">http://www.kghr.net/</a></td>
</tr>
<tr>
<td>KSUT - FM 91.3</td>
<td>Ute</td>
<td>Colorado</td>
<td>970-563-0255</td>
<td><a href="http://ksut.org/">http://ksut.org/</a></td>
</tr>
<tr>
<td>Native Voice 1</td>
<td>N/A</td>
<td>Nationwide</td>
<td>907-793-3521</td>
<td><a href="http://www.nv1.org/index.html">http://www.nv1.org/index.html</a></td>
</tr>
</tbody>
</table>

(online station)

<table>
<thead>
<tr>
<th>Programs</th>
<th>Method of Contact</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native America</td>
<td>505-999-2440</td>
<td><a href="http://www.nativeamericacalling.com/">http://www.nativeamericacalling.com/</a></td>
</tr>
<tr>
<td>Calling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NNOSBS</td>
<td><a href="mailto:keelong@navajo-nsn.gov">keelong@navajo-nsn.gov</a></td>
<td><a href="http://www.obs.navajo-nsn.gov/">http://www.obs.navajo-nsn.gov/</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Informative Sources</th>
<th>Method of Contact</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isleta Pueblo</td>
<td>505-869-3111</td>
<td><a href="http://www.isletapueblo.com/">http://www.isletapueblo.com/</a></td>
</tr>
<tr>
<td>Town of Taos</td>
<td>(575) 751-2000</td>
<td><a href="http://www.taosgov.com/">http://www.taosgov.com/</a></td>
</tr>
</tbody>
</table>

#### 3.1.1 Radio Station Interviews

After we created the list of contacts, we developed a list of questions. These questions were split into four categories: Startup, Personnel, Topics, and Logistics, as seen in Table 5. Startup questions included all the information on initial investments or requirements of a radio station such as money requirements, the mission of the station, and how revenue is generated. The startup questions provided us insight on the foundation of each radio station. The second category, personnel, included specific questions on how many employees are needed to run a successful radio station and if volunteers are working for the radio station. These questions gave us insight into how many employees are needed to run a station. The third category, topics, covered the station’s programming in order to discover what sorts of topics are discussed, how they are selected, how the station handles potentially controversial or offensive content, and the demographics of the station’s main audience. The last category, Logistics, included important information on how the radio station is run. Questions about air time, strength of the radio frequency, technology while broadcasting after hours, and ownership of a web site were asked, which allowed us to understand the functionality of the radio.
### Table 5: Sample Native American Radio Station Interview Questions

<table>
<thead>
<tr>
<th><strong>Start up:</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What is your name and role in this radio station?</td>
<td></td>
</tr>
<tr>
<td>2. How did your station get started?</td>
<td></td>
</tr>
<tr>
<td>3. How long did it take?</td>
<td></td>
</tr>
<tr>
<td>4. How much money did you need for an initial investment?</td>
<td></td>
</tr>
<tr>
<td>5. What is the mission of your station?</td>
<td></td>
</tr>
<tr>
<td>6. How is your radio station supported?</td>
<td></td>
</tr>
<tr>
<td>a. If you don’t mind me asking, how much revenue does your station generate, and how?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Personnel:</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How many people does it take to keep it running?</td>
<td></td>
</tr>
<tr>
<td>2. Do you have volunteers?</td>
<td></td>
</tr>
<tr>
<td>a. If yes, how does your station find volunteers?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Topics:</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What topics do you discuss on your station?</td>
<td></td>
</tr>
<tr>
<td>a. How do you select these topics?</td>
<td></td>
</tr>
<tr>
<td>b. Which programs have the highest number of listeners?</td>
<td></td>
</tr>
<tr>
<td>i. What time is this program</td>
<td></td>
</tr>
<tr>
<td>c. Do you discuss Native issues including social, economic, environmental issues?</td>
<td></td>
</tr>
<tr>
<td>i. If yes, how do you make sure you don’t offend listeners when discussing?</td>
<td></td>
</tr>
<tr>
<td>2. Who is your main audience?</td>
<td></td>
</tr>
<tr>
<td>3. How many listeners do you have?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Logistics:</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How often is your station on the air?</td>
<td></td>
</tr>
<tr>
<td>2. How far does your stations signal reach? Wattage? Mile radius?</td>
<td></td>
</tr>
<tr>
<td>3. What technology is used to keep it running?</td>
<td></td>
</tr>
<tr>
<td>4. Is someone in the booth the entire time?</td>
<td></td>
</tr>
<tr>
<td>5. Does your station have a website?</td>
<td></td>
</tr>
<tr>
<td>a. Do you stream from the stations website?</td>
<td></td>
</tr>
<tr>
<td>b. If yes, how does streaming influence viewership? Listenership</td>
<td></td>
</tr>
<tr>
<td>c. Podcast?</td>
<td></td>
</tr>
</tbody>
</table>

3.1.2 Radio Programs interviews

We also developed similar questions to suit radio programs, as seen in Table 6. The programs are syndicated and sold to radio stations around the United States. These questions were program-specific and mainly focused on the program’s topics of discussion.
Table 6: Sample Native American Program Interview Questions

<table>
<thead>
<tr>
<th>Startup</th>
<th>1. What is your name and role in this radio program?</th>
<th>2. How did the program get started?</th>
<th>3. What is the mission of your program?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel</td>
<td>3. How many people does it take to keep it running?</td>
<td>4. Do you have volunteers?</td>
<td>a. If yes, how does your station find volunteers?</td>
</tr>
<tr>
<td>Topics</td>
<td>1. What topics does your radio program discuss on your station?</td>
<td>a. How does your radio program select these topics?</td>
<td>2. Which programs have the highest amount of listeners?</td>
</tr>
<tr>
<td>Logistics</td>
<td>1. On how many stations does your program play?</td>
<td>2. How do you get stations to play your program?</td>
<td></td>
</tr>
</tbody>
</table>

3.1.3 Pueblo of Isleta Case Study

We conducted a specific Case Study with the Pueblo of Isleta, using the procedure followed when interviewing the other radio stations, but asking more specific questions about the steps adopted for the launch of their LPFM station, which is currently still in progress. The categories of questions were the same as in our previous radio station interviews, namely Setup, Personnel, Topics and Logistics, as seen in Table 7. However, the questions connected with each of these categories were asked in the future tense due to the current state of the LPFM process in the Pueblo of Isleta. The questions fall under the category of setup focused more on the community and what was involved in making the decision to obtain a LPFM license and how the process was affected by the fact that Isleta is a sovereign nation. The questions concerning personnel focused on how many people they plan to employ and if they will expect to have volunteers. The questions in the category of topics focused on what topics they intend to discuss on their station once it is operational. The questions in the category of Logistics focused on what audience they are trying to attract as listeners, the technology they plan to use to run their station, and how they plan to generate revenue.
**Table 7: Sample Questions for Isleta Pueblo**

### Setup

1. How did you decide you wanted to apply for a LPFM radio permit?
   a. How many people were involved?
2. Did you need community approval to apply for the Low Power FM permit?
3. What was the process you had to go through to gain approval to apply for a LPFM?
   a. How long did it take?
4. What is the proposed mission for your station?
5. Did the fact that you are a sovereign nation change the application process?

### Personnel

1. How many people do you expect to run the station?
   a. Do you hope to have volunteers

### Topics

1. What kind of programming do you plan on broadcasting?
   a. What topics do you plan on discussing?
   b. Do you plan to play any cultural programming?
      i. Would you mind sharing any ideas you have for this cultural programming?

### Logistics

1. What kind of audience do you hope to attract?
   a. What age range?
2. How many hours per day do you plan on broadcasting?
3. How far do you expect to broadcast? Wattage? Mileage?
4. What type of equipment do you plan on obtaining?
5. How much is the initial investment for this station?
6. Do you plan on using underwriting or advertising to generate revenue?
7. Do you plan on setting up a website for your station?
   a. If yes, do you plan on utilizing internet broadcasting?
   b. If no, why?

### 3.1.4 Interview Response Analysis

Once the questions were solidified, we interviewed the radio contacts listed in Table 4 in a semi-structured interview format. We started the phone interviews with an introduction about our project and asked the interviewee if they were okay with being recorded and published, to ensure that we can use their information in our project. After our brief introduction about ourselves, we asked the list of sample questions. Since all the answers were recorded, they were transcribed to avoid or decrease the potential for miscommunication and to ensure that everything that was said was accounted for (refer to 7. Appendix for transcripts).

After collecting and transcribing the interview responses we organized the resulting information into a matrix (Table 8), separated into three categories: logistics, financials and topics. Each category provided helpful information on implementation cost, programing topics, and general information. We then analyzed the information we acquired from filling in the matrix, allowing us to draw various conclusions about how a station is run and successful programing topics.
The logistics section of the table included data such as size of the radio station in terms of wattage and mileage, number of employees, number of volunteers, and time on the air. Logistical information provided the reader with a general scope of how a radio station is run.

The financials section included information on implementation cost, revenue, and method of revenue generation. The financial section was very important to accurately depict the realistic investments needed to start a radio station.

The topics section provided ideas for successful and interesting programming. We organized the topics that were discussed by the station so we could clearly visualize what was communicated through broadcasting. Many tribal radio stations hope to spread awareness of prominent issues to their communities while also reaching out to a broad audience. The choice of topics in each radio station is up to the production manager. Studying various topics that different radio stations discuss is important in understanding their listenership and audience base. A "social issues" discussion would include drug abuse, alcoholism and suicide awareness, while "economic issues" includes topics such as poverty and unemployment within the Native American communities. The topic “culture” encompasses many aspects of Native American day-to-day life, such as religion and traditional story telling or readings. Putting "X's" in the designated box under each radio station if a topic is discussed allowed us to infer its importance to the community.
Table 8: Empty Evaluation Matrix for Radio Interview Responses

<table>
<thead>
<tr>
<th>Station / Program</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logistics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size (Wattage)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size (Mileage)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volunteers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time on Air (Hour)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Station</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financials</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implementation Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Method of Revenue Generation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Station</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Art</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Culture</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic Issues</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Issues</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>History</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interviews</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mainstream Music</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>News</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Issues</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sports</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talk Show</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traditional Music</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.2 Creating a template for the successful implementation of a Low Power FM radio station in a Native American community

Through the interviews and Case Study described above, we created a guide that anyone seeking to establish a LPFM station in a Native American community can use to aid them in the creation of the station. From the interviews we performed we gained information about the process required to get a station started and approved within a Native American community. Specifically we looked for information relating to the process that was used to approach the tribal government and get the creation of the station approved.

After categorizing all of the information in the previous objective we organized the information we obtained about the process involved in the creation of a station into a series of phases. Each of these phases was then divided into subsections to so that the process could be described in greater detail.
These phases focused on how the process of creating a LPFM station on tribal land might differ from the creation of a LPFM station in other communities.

Based on the research we performed, we brainstormed phases that we used to organize the interviews and the case study into a guide for the construction of a LPFM station. The phases that resulted from this brainstorming are:

- Identify a Pueblo
- Get Tribal Government Approval
- Find Source of Initial Income
- Submit Application
- Develop Programming
- Determine Start-Up Costs
- Begin Construction

It is likely that phases like Develop Programming and Determine Start-Up costs can be performed at the same time, as seen in Figure 2. Once the phases were decided upon, we analyzed each of the interviews that we performed. The information from these interviews was used to inform the steps that we developed within each phase.

*Figure 2: Phases of LPFM Template*
4. Results and Analysis

In this section, we describe the results we obtained by addressing objectives 1 and 2. The interviews we performed provided us with detailed information on every station we interviewed, which we then organized into categories. Then by combining our background research and what we had learned by analyzing our interviews we produced a template for how to implement a LPFM station.

4.1 Interview Responses and Analysis

Through our interviews we gathered a variety of responses from radio stations, radio programs, and informative sources. The list of successfully contacted sources, refer to table 9, provides contact information, location, and tribe if applicable. The figure above provides a visual representation of the locations of each source.
### Table 9: List of Key Informants and their Contact Details

<table>
<thead>
<tr>
<th>Station</th>
<th>Tribe</th>
<th>State</th>
<th>Name of Contact</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>KUYI - FM 88.1</td>
<td>Hopi</td>
<td>Arizona</td>
<td>Macadio Namoki</td>
<td>Development and Marketing Coordinator</td>
</tr>
<tr>
<td>KILI - FM 90.1</td>
<td>Lakota</td>
<td>South Dakota</td>
<td>Anonymous</td>
<td>Unknown</td>
</tr>
<tr>
<td>KTDB - 89.7</td>
<td>Navajo</td>
<td>New Mexico</td>
<td>Barbra Maria</td>
<td>Station Manager</td>
</tr>
<tr>
<td>KHAC - AM 880</td>
<td>Navajo</td>
<td>New Mexico</td>
<td>Greg Lewis</td>
<td>Station Manager/ Director of Broadcasting</td>
</tr>
<tr>
<td>KCIE - FM 90.5</td>
<td>Jicarilla</td>
<td>New Mexico</td>
<td>Romaine Wood</td>
<td>Station Manager</td>
</tr>
<tr>
<td>KGHR - FM 91.5</td>
<td>Navajo</td>
<td>Arizona</td>
<td>Anonymous</td>
<td>Superintendent</td>
</tr>
<tr>
<td>Programs</td>
<td></td>
<td></td>
<td>Tara Gatewood</td>
<td>Host and Producer</td>
</tr>
<tr>
<td>Native America</td>
<td>N/A</td>
<td>Nationwide</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calling</td>
<td></td>
<td></td>
<td>Tara Gatewood</td>
<td>Host and Producer</td>
</tr>
<tr>
<td>NNOBS</td>
<td>Navajo</td>
<td>Arizona and New Mexico</td>
<td>Christina Tsosie</td>
<td>Media Production Specialist</td>
</tr>
<tr>
<td>Informative Sources</td>
<td>Isleta Pueblo</td>
<td>Isleta</td>
<td>New Mexico</td>
<td>Nathan Lujan</td>
</tr>
</tbody>
</table>

4.1.1 Radio Station Interview Responses and Analysis

After conducting interviews with five existing tribal radio stations (KGBR is no longer broadcasting due to lack of funding) we filled in the matrix (table 10) in preparation for further analysis. Refer to 7. Appendix for interview transcriptions.
### Table 10: Characteristics of Native American Radio Stations Results

<table>
<thead>
<tr>
<th>Station</th>
<th>KUYI</th>
<th>KILI</th>
<th>KCIE</th>
<th>KHAC (AM)</th>
<th>KTDB</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Logistics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size (Wattage)</td>
<td>69,000</td>
<td>100,000</td>
<td>100</td>
<td>30,000</td>
<td>5,000</td>
</tr>
<tr>
<td>Size (Mileage)</td>
<td>100</td>
<td>N/A</td>
<td>N/A</td>
<td>100</td>
<td>45</td>
</tr>
<tr>
<td>Employees</td>
<td>4</td>
<td>5</td>
<td>11</td>
<td>3 full, 5 part</td>
<td>5</td>
</tr>
<tr>
<td>Volunteers</td>
<td>25</td>
<td>8-10</td>
<td>13</td>
<td>2</td>
<td>N/A</td>
</tr>
<tr>
<td>Time on Air (Hour)</td>
<td>24/7</td>
<td>24/7</td>
<td>24/7</td>
<td>24/7</td>
<td>18/7</td>
</tr>
<tr>
<td>Audience</td>
<td>150,000/2weeks</td>
<td>300,000/month</td>
<td>2,900/week</td>
<td>N/A</td>
<td>2,000/week</td>
</tr>
<tr>
<td><strong>Financials</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implementation Cost</td>
<td>150,000</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>250,000</td>
</tr>
<tr>
<td>Revenue</td>
<td>30,000-50,000</td>
<td>200,000</td>
<td>10,000-15,000</td>
<td>100,000</td>
<td>N/A</td>
</tr>
<tr>
<td>Method of Revenue Generation</td>
<td>Grants, memberships, underwriting, advertising, sponsorships, fundraising</td>
<td>Grants, Gifting</td>
<td>Funded by Jicarilla Apache Nation, CPB Grants, Underwriting, Pledge Drives</td>
<td>Commercials, Advertising, Donations (1/3ish), annual fundraisers, underwriting</td>
<td>Federal Funding, CPB grants, Donations, Fundraising.</td>
</tr>
<tr>
<td><strong>Topics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Art</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Culture</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Economic Issues</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Education</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Environmental Issues</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>History</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interviews</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Mainstream Music</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>News</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Issues</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Sports</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talk Show</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Traditional Music</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

**Total**

<table>
<thead>
<tr>
<th>Topic</th>
<th>KUYI</th>
<th>KILI</th>
<th>KCIE</th>
<th>KHAC (AM)</th>
<th>KTDB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Culture</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Economic Issues</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Education</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Environmental Issues</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Health</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>History</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Interviews</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Language</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Mainstream Music</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>News</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Social Issues</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Sports</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Talk Show</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Traditional Music</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>
The logistics section of the table has provided important information on signal strength, personnel, and time on the air. The signal strength and signal radius vary from station to station. Unfortunately there is no accurate way to determine mile radius based on signal watts due to geographical changes and interfering signals. The smallest signal (100 watts) is generated by KCIE radio of the Jicarilla Apache Nation, which, according to Romaine Wood, primarily reaches within the reservation. The radio with the strongest signal (100,000 watts) is KILI radio of the Lakota Tribe, which reaches far beyond the reservation, and thus is accessible to both tribal members and outsiders.

According to our interviews, the average number of employees working at these radio stations is about 3-5 full time staff. KCIE, being the smallest radio in terms of signal, surprisingly has eleven full time staff members. According to Romaine Wood, KCIE’s station manager, they are funded by the tribal government, allowing them to have a larger staff. Four out of five of the interviewed tribal radio stations broadcast twenty-four hours a day, seven days a week. KTDB only broadcasts eighteen hours a day, seven days a week, operating from 5 am to 11 pm.

The financials section of this table has provided important information on the initial investment of the station, current revenue, and methods of revenue generation. Only two interviewees (KUYI and KTDB) were able to provide estimates of implementation costs (initial investment). Macadio Namoki of the Hopi station KUYI estimated their startup costs at around 150,000, while Barbra Maria of the Navajo station KTDB estimated their startup costs at around 250,000. The other stations did not have estimates for startup costs, since each of them were up and running before the 1980s. The revenue generation varies from station to station. Some stations reported that they do not need to rely on their yearly advertising sales because they have other sources of income. KILI demonstrates the highest revenue generation of $200,000 per year primarily from grants and gifting. KCIE demonstrates the lowest revenue generation of $10,000-15,000 per year, but since they are supported by the Jicarilla Apache Nation, they do not need a budget for employee salaries. The most common methods for revenue generation from among our interviewed stations were grants, underwriting/advertising, and fundraising.

Topics of discussion vary from station to station, according to our interviewees. We identified the topics that were most discussed among the five interviewed radio stations. Each station provides programming on social and economic issues that Native Americans face. Native American challenges need to be discussed so communities can begin to address these issues. Other popular topics include health discussions, cultural discussions (such as storytelling and religion) and educational programming.

4.1.2 Syndicated Programs and Key Informants Interview Responses and Analysis

4.1.2 Syndicated Programs and Key Informants Interview Responses and Analysis

4.1.2 Syndicated Programs and Key Informants Interview Responses and Analysis

After conducting interviews with the Pueblo of Isleta, we filled in the matrix (table 11) in preparation for further analysis. Refer to 7. Appendix for interview transcriptions. The logistics section of Table 11 has provided important information on the Pueblo of Isleta’s estimated signal strength and time on the air. Since the Pueblo of Isleta is in the early stages of planning their Low Power FM they do not have full information of all of the logistics of their station. They plan to broadcast within a ten-mile radius, just far enough to reach all parts of their reservation. When they start up their station they are given four hours of airtime per day.
Table 11: Characteristics of Native American Programs and Informative Sources

<table>
<thead>
<tr>
<th>Station/ Program</th>
<th>Isleta Pueblo LPFM startup (estimates)</th>
<th>NNOBS (Program)</th>
<th>Native America Calling (program)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logistics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size (Wattage)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Size (Mileage)</td>
<td>10</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Employees</td>
<td>N/A</td>
<td>5</td>
<td>Unknown</td>
</tr>
<tr>
<td>Volunteers</td>
<td>N/A</td>
<td>N/A</td>
<td>Unknown</td>
</tr>
<tr>
<td>Time on Air (Hour)</td>
<td>4/7</td>
<td>30min</td>
<td>1/5</td>
</tr>
<tr>
<td>Audience (people/week)</td>
<td>N/A</td>
<td>N/A</td>
<td>500,000/week</td>
</tr>
<tr>
<td># of stations with syndicated programs</td>
<td>N/A</td>
<td>8</td>
<td>60</td>
</tr>
</tbody>
</table>

**Station**

**Financials**

<table>
<thead>
<tr>
<th>Implementation Cost</th>
<th>10,000-25,000</th>
<th>N/A</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>N/A</td>
<td>N/A</td>
<td>Unknown</td>
</tr>
<tr>
<td>Method of Revenue Generation</td>
<td>N/A</td>
<td>N/A</td>
<td>Unknown</td>
</tr>
</tbody>
</table>

**Station**

**Topics**

<table>
<thead>
<tr>
<th>Art</th>
<th>X</th>
<th>X</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culture</td>
<td>X</td>
<td>X</td>
<td>3</td>
</tr>
<tr>
<td>Economic Issues</td>
<td>X</td>
<td>X</td>
<td>3</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Environmental Issues</td>
<td>X</td>
<td>X</td>
<td>2</td>
</tr>
<tr>
<td>Health</td>
<td>X</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>History</td>
<td>X</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Interviews</td>
<td></td>
<td>X</td>
<td>1</td>
</tr>
<tr>
<td>Language</td>
<td>X</td>
<td>X</td>
<td>3</td>
</tr>
<tr>
<td>Mainstream Music</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>News</td>
<td>X</td>
<td>X</td>
<td>3</td>
</tr>
<tr>
<td>Social Issues</td>
<td>X</td>
<td>X</td>
<td>2</td>
</tr>
<tr>
<td>Sports</td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Talk Show</td>
<td>X</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Traditional Music</td>
<td>X</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

We also put in responses from the interviewed programs Native America Calling and NNOBS. These programs broadcast for no more than an hour each day. Native America Calling is currently on 60 radio stations throughout the United States while NNOBS is currently on 8, mainly serving to the Navajo Nation. Native America Calling reaches out to Native Americans all over the United States, reaching an audience of about 500,000 people per week.
The financial section of this matrix provided us with information on the estimated startup costs for the LPFM station in the Pueblo of Isleta. According to Kristin Anzara, the implementation cost for LPFM would be ranging from 10,000 to 25,000. It was also discussed that the radio station will be supported by tribal government funding, similar to KCIE of the Jicarilla Apache reservation. Unfortunately we did not acquire any information for the programs that we interviewed.

The Pueblo of Isleta is currently developing topics of discussion, but plans on heavily focusing on getting youths involved in the community. The Pueblo plans on incorporating culture, language and educational programing on their station.

Native America Calling discusses a large range of topics, from Native American art and history to health issues in Native American communities. According to Tara Gatewood, Native America Calling chooses its topics based on listeners’ requests. NNOBS, being a shorter show, discusses fewer topics that are more focused towards the Navajo Community. According to Christina Tsosie, 90% of the program is spoken in the Navajo language. Topics of discussion on this program include many aspects of culture and language, as well as prominent Native American challenges such as social and economic issues.

Unfortunately we were unable to get any information from the FCC. We called and, after being redirected multiple times, we were finally directed to someone who could potentially have helped. However, she was out of the office when we called, and never responded to our voice message.

4.2 A template for the implementation of a Low Power FM radio station in a Native American community

From the interviews that we performed we have created the following phases as part of a template for the implementation of a LPFM radio station in a Native American community.

Phase 1: Identify a Pueblo

This was selected as the first phase because before starting the rest of the process, it is important to find a community that suits the stations needs that will also benefit from the station that will be created. The process that should be used to find a Pueblo to work with has been divided into a number of steps.

Step 1: Consider the Effects of Geography

The desired range of the station is affected greatly by geographical location. To reach as far as possible with the LPFM maximum signal strength of 100W, find a location where the transmission tower can be significantly higher than the surrounding area, or the area is open and free of obstructions. Google Earth would be a good tool to use here to learn about the geographic region around each Pueblo. Once the area has been examined using this tool, it could prove beneficial to visit the Pueblos that have promising geography to gain a better idea of the area.

Step 2: Determine Listenership

The desired audience size will affect the location the station should be set up in. If the size of the audience is important then it should be taken into consideration how many people the signal range will
be able to reach. For a larger listenership, consider looking into working with a Pueblo that is close to a large city like Albuquerque.

The stations we interviewed all had different target audiences based on their programming. Some stations attracted an audience that spanned all age groups like Appendix F: KTDB. Others were more targeted such as Appendix D: KHAC, who mostly focused listeners aged 50 and up. One thing all the stations had in common was a desire to reach out to their local Native communities.

Step 3: Determine Demographics

It is also important to consider the demographic that will be targeted. This will have a huge impact on the type of programming that will be proposed when talking to the tribal government.

Step 4: Consider Opinion of Broadcasting on Tribal Land

Determining how the various Pueblos feel about broadcasting will influence which pueblos should be approached. This could be determined by distributing a survey or a discussion with personal contacts within the Pueblo.

Step 5: Identify which Pueblos to Contact

After going through each of these steps, the list of Pueblos that seem like good candidates for further consideration should be clear. Comparing what was learned in the previous steps with the criteria for the station that will be created will produce this list. The list should include Pueblos that are capable of fulfilling as many of the desired criteria as possible.

Phase 2: Get Tribal Government Approval

Once the Pueblos to be contacted have been selected, the tribal governments will need to be contacted. In all of the interviews that we performed, we found that the creation of a station was something that required the approval of the tribe’s government. To obtain this approval, the idea for the station must be pitched to the community. Explaining how the station will benefit the community is a good starting point for this pitch. Additionally, explain any ideas for programming. If the desired discussion topics prove to be sensitive topics, then it might affect the decision that the tribal government makes regarding the existence of the station.

In some cases, having enough community support will be what is needed to convince the tribal government that the station would be a worthwhile addition to the community. In the case of Appendix A: KUYI, the people who wanted to start the station created a petition. Once they got enough signatures they took it to their Tribal Counsel as proof that the community desired a local radio station.

Phase 3: Find Source of Initial Funding

Once approval is obtained it will be necessary to find an initial source of funding for the station. This funding amount will need to be able to cover the approximate cost required to start up a station.
This funding can come from a number of different places since it is only the initial amount of money that is needed to start up the station.

Step 1: Research Grants

One possible option for initial funding would be grants. There are a large number of grants available from organizations like the Corporation for Public Broadcasting (CPB) and the Association of Public Television Stations (APTS). It would be a good idea to look through these grant options and see if the station being created would qualify.

There are also more focused grant options. The grants provided by the Santa Fe Community Foundation\textsuperscript{34} are for communities located near Santa Fe. The grants provided by the First Nations Development Institute\textsuperscript{35} are for Native American Communities. More focused grants could be easier to obtain since they tend to have a much smaller pool of applicants.

Step 2: Determine if the Pueblo will Provide Funding

It is quite possible that the Pueblo the station is located on will be willing to assist with the funding for the station. This station will become a part of the community that it is built in, so the chances of the tribal government being interested in at least helping with the start-up costs is high. Of the stations we interviewed, Appendix B: KCIE of the Jicarilla Apache Nation and the station that the Pueblo of Isleta is starting both receive funding from their tribal governments.

Phase 4: Application Process

The application process that must be completed for a LPFM station is relatively complicated. There is a lot of knowledge that is required to be able to submit the application correctly.

Step 1: Contact Expert to Aid in the Application Process

Through our interview with the Pueblo of Isleta (Appendix J: Pueblo of Isleta Part 2), which has recently completed the application process for a LPFM license, we found out that the easiest way to get the application completed properly was to get an expert’s assistance. Though this costs some money, it ensures that the application is completed correctly and that there are no errors that might cause the application to be rejected. It would be a good idea to contact the Pueblo of Isleta if assistance is desired for the application process. They received a recommendation to use a certain consulting firm for the process. Due to their success in obtaining their LPFM licenses, they would likely be willing to pass the recommendation on to anyone else interested in submitting an application.

Step 2: Submit Application

It is now time to submit the paperwork and wait for the response. A construction permit will be received if the FCC has approved the LPFM station request. From that point in time there will be 18 months to get the station up and running.

\textsuperscript{34} Santa Fe Community Foundation, “Grantseekers: Grant Guidelines.”
\textsuperscript{35} First Nations Development Institute, “Our Programs.”
The Pueblo of Isleta actually found that, as a Pueblo, they were given priority when submitting the application. They learned about this through communications they had with the FCC. According to Ms. Anzara, the Pueblo was allowed to skip a step in the process the FCC used when determining who would and would not receive a LPFM license.

Phase 5A: Develop Programming

The programming that is played on the station is very important. Different types of programming will attract very different audiences.

Step 1: Determine How to Divide Time on Air

Typically radio shows are one-hour blocks. How these blocks are filled is important. It will need to be decided if the station will play any syndicated programs and see which time slots they would take up. It will need to be decided if the station will have continuous live programming or if some of the programs will be automated/prerecorded. It would be a good idea to come up with a regular weekly program schedule. Having a regular weekly schedule will help to establish the station in people’s minds. They might decide they like a program and want to tune into the station the next time that program airs.

Step 2: Determine Desired Discussion Topics

For the programs that are produced from the station, discussion topics will need to be decided upon. The topics selected need to be ones that can be continuously covered and will have new information each week. It is possible to get input from other media outlets on what topics would be good to discuss. Listening to other Native American radio stations would also be a good way to determine what topics people would be interested in discussing.

Step 3: Get Input on Discussion Topics

Some desired discussion topics might prove to be sensitive. Getting input from the tribal government is important to ensure that these sensitive topics are known, so that they will not be aired. If the Pueblo the station is located on does not like outsiders hearing their language, but a radio show where people only speak in their Native language is produced, it could offend a number of people and jeopardize the existence of the station. Discussing the topics that will be broadcasted with the tribal government will avoid these issues.

Phase 5B: Determine Start-up Expenses

While developing the programming for the station, time should also be taken to figure out how much money is needed to get the station running. The amount of money needed to start-up a station mostly consists of the equipment needed to get the station up and running. Table 1: Equipment for a LPFM station contains a list of equipment that could be needed to start-up a station. Table 12 provides a way of organizing the equipment that has been chosen and determining how much it will all cost. In many cases used equipment can be bought to lower the initial investment cost.
Phase 6: Begin Construction

With all of these Phases completed, it is time to begin construction on the LPFM radio station. The construction of the station and the operation of the station once it is completed are outside the scope of this project. It would be a good idea to contact the station being started on the Pueblo of Isleta to get more advice on the next steps that should be taken. They might be able to give useful hints and tips on how to continue from this point. It should be noted that at the time of writing this report, the Pueblo of Isleta had 16 months to get their station fully functioning.
5. Recommendations

As a result of our research and interview process, our group has created recommendations. These recommendations are based on the research that our team conducted and the numerous interviews we performed. Our recommendations are as follows:

- Start with Internet Broadcasting
- Produce a Syndicated Program
- Utilize our Template

Each of these recommendations will be discussed in the remainder of this section. The idea behind these recommendations is to allow for a progression from something simple and inexpensive to set up (Internet Broadcast) to a more complex and expensive set up (LPFM Station).

5.1 Start with Internet Broadcasting

Based on the research that has been performed it seems unlikely that there will be another window to allow for the filing of more LPFM stations in the near future. Additionally, even if an opportunity for LPFM radio did open up, having an already established internet broadcast would increase the chances of the license application making it through the review process. In many cases there is some competition over the frequencies that are available when there is an open filing window. To gain a competitive edge during the application process for a LPFM license, it would be wise to demonstrate possessing the capability to produce an online radio show. Additionally, a functional internet broadcast will allow for broadcasting even in the case of being denied a LPFM station license.

One of the main issues to consider in this situation is how the money to sustain the broadcast will be obtained. As with conventional radio, there is equipment that must be initially bought. Additionally there are a number of recurring costs that must be met to run an internet broadcast. As with conventional radio, advertisements can be used as a source of revenue. In this case, advertisements don’t need to necessarily be something within the broadcast; they can be in banners on the website itself. Another possible method of making money to help keep the broadcast running would be to have a subscription fee for the potential podcasts.

As far as the internet broadcasting option goes, it is debatable if a podcast or a live stream is better. It would not be overly difficult to produce either. Both options have their advantages. The live stream could be recorded and then those recordings could be placed on the website so they could be listened to by people at a later date. The podcasts could be produced at any time and then uploaded. The live stream could be automated at times when people are not doing live shows. This allows people to find it even at times when live programming is not being aired. They can listen for a bit to see if they like the programming and decide from there if they want to continue to listen.

Both of these options allow for the creation of original content. Creating original content is one of the most important parts of any type of broadcast, and it would be a good starting point for our other recommendations. The topics discussed on the internet broadcast would be easily transferable to a syndicated program or a LPFM radio station.

36 Lasar, “Second Low Power FM Filing Window?”. 
5.2 Produce a Syndicated Program

Based on research that has been performed, as well as the interviews with Appendix G: Native America Calling and Appendix H: NNOBS, producing a syndicated program would be a viable stepping-stone toward successfully implementing a Low Power FM radio station. Producing a syndicated program will provide the option to have very successful programing with less maintenance than a fully functioning radio station. Syndicated programs are generally aired on an hour per day basis on multiple radio stations.

There are four simple steps in creating a syndicated program, as shown in figure 3.

![Steps for Producing a Syndicated Program]

We also recommend getting in contact with Native Voice 1 and any other syndicated programs to find out more information.

---

37 Witting, “Syndicate Now!”.
5.3 Utilize Our Template

Finally, we recommend that whomever wishes to start a LPFM radio station on Tribal land utilize our template, seen below.

*Figure 5: Template Created for LPFM setup on Native American Land*

This template was created specifically for setting up a LPFM station on Native American land.
6. Bibliography


Forest, Lee De. “Space Telegraphy.”, February 18, 1908.

Google. “Google Maps.” Google Maps. Accessed April 13, 2014. https://www.google.com/maps/dir/Fort+Marcy+Hotel+Suites,+321+Kearney+Ave,+Santa+Fe,+NM+87501/204+Montezuma+Ave,+Santa+Fe,+NM+87501/@35.6879031,-105.9417811,16z/data=!3m1!4b1!4m14!4m13!1m5!1m1!1s0x871850363b5210fd:0x175731239f4e7214!2m2!1d-105.9323772d35.6909681m5!1m1!1s0x8718504163bb7551:0xfb2a2960f1888e7c12m2!1d-105.9426022d35.6840026i3e2.


Hi, my name is Michelle Zayas and I am working with 2 other college students on a project relating to broadcasting media. If you have the time we would like to ask you some questions about your station. Are you okay with being recorded and potentially published?

Sure

How did you get started? How did your radio station get started?

The radio station was started back in I believe 1998 when the community here decided they needed a radio to inform the public about events that are going on in the community.

How long did it take?

From 1998, I think they started a petition to get the radio station started and in 2000 our first on air sign on December 21, 2000.

How much money did you need for an initial investment to start your station?

I'm not aware of the amount right now, but I do believe that we needed close to 150,000 to start our radio.

Is that 150,000?

Yes

How often are you on the air?

The radio station is on 24/7

How far does your signal reach?

We operate on 69,000 watts, which is about a good 100-mile radius around the reservations where we are located

Does it only reach out to the Hopi Reservation?

We reach out to the Hopi Reservation, parts of the Navajo Reservation, and we also reach into surrounding communities like Flagstaff Arizona, Windfall Arizona, Page Arizona, and up into Kinley, where the Navajo reservation is

What topics do you discuss on your station? Like, what programs do you have?

We consider ourselves an eclectic radio station, so we play all types of genre of music ranging from reggae, rock, blues, Cajun-zydeco, and hip-hop. We also air other programs that are more
for Native listeners, like we also have Native America Calling, through Native Voice 1 in Albuquerque NM, and then we also air Art of the Song, we also air Car Talk, which is a car radio programing, and we also air interviews and other types of cultural events that are unique to our listenership on the reservation.

How do you select these types of topics?

They just come to us. It might be someone from the community wanting to discuss a topic that might either be something like Cancer, or some type of outreach that might be happening in the community for the community to participate or it could be our local Hopi high school team show or just someone usually comes in through the doors and if we have time, they might be an artist and we might open up the radio line for an interview at that time.

Which programs have the highest amount of listeners?

I would say we have two to three programs that are most listened to. One would be our [inaudible] programming which is our traditional programming meaning that in the morning from 6am to 8am we play noting but traditional Hopi music and at 6pm in the evening, we have birthday dedications so the community can call in from 10am to 2pm and dedicate a birthday, or an anniversary, or a congratulatory message to anyone in the community. And then on the weekends we offer a program called drumbeat, which is a pow-wow, type of Native music that a lot of natives around the country listen to.

Do you discuss Native issues including social and economic and environmental issues?

Yes all Native issues are open to discussion. We also offer the opportunity for students during their talk show to discuss those issues as well.

How do you make sure not to offend listeners?

There's all types of listeners, so we try to be open to all the topics that come to the radio station, so if there is someone that might not like a topic that we are airing, then we take that criticism and we try to make it better for the next show.

Are you familiar with different forms of internet broadcasting?

We're not really into vlogging. We do have a twitter site and we are also on Facebook, but that's the closest that we come as far as social media.

Who would you say your main audience is?

I would say native. We also have a lot of--it just depends on the programming that we play during the day. Like one day we might have, like Monday we have our blues, Tuesday is our Cajun-Zydeco, Wednesday would be our country western, Thursday would be reggae, Friday would be hip-hop and Saturday would be rock. So we have a wide variety of listeners that tune in for those specific types of genre of music. Or they tune in during the day when they know that Native America Calling is on or they tune in for the birthday show. It just varies.
Would you say you have a wide age range?

Yeah I would say all the way out from the young kids to the elderly because on Sundays we also offer a youth program called Shooting Stars, which is recordings from the youth. We have volunteers that go out to the community and they go and capture singing that they record, and we bring those back to the radio station and we put them in the hour long program when we air it. We also have the morning time from 6 to 8 we hear nothing but traditional programming and everyone from the young to the old listens to that program. In the evenings we have that specialty programming so it just varies. It could be from birth to the elderly.

How many listeners would you say you have per week?

I would say, within a two-week span, about 150,000 listeners. It just depends on, because we also reach down towards I-40 corridor people tune in when they’re passing through the corridor and when they lose signal they tune out. So and then we also have our local reservation folks here that have their particular programs that they listen to. I would say it’s 150,000 in a two week time.

How is your radio station supported?

We’re a non-profit organization. We operate through grants yearly we look out for grants and then we also apply for local grants here on our reservation. We also seek membership where individuals can adopt a watt, ranging from 1 watt to 69,000 since we operate on 69,000 watts we need our membership to coincide with that wattage. Also offer underwriting, which is the thing that advertising and community-based sponsorships and also we have a lot of people that just donate to the radio station so we also do fundraising sometimes throughout the year, we try to plan for at least one, maybe two fundraising campaigns where it might be like a music festival or just online giving which is going to happen here shortly. April 9, we will be doing online giving called Arizona gives where non-profits across the state of AZ can participate in an online giving challenge where they try and seek most donors and most dollars and the non-profit gets a stipend for the amount that they win.

If you don't mind me asking, how much does your station generate?

I would say maybe 30,000-50,000 depending on what we do throughout the year. If we don’t have very much underwriters or the sponsors then we try to fill that in with either memberships or donations or fundraising to end the year with what we are targeting.

Zuni and Jicarilla used to have radio stations. I was wondering if you knew what happened with their radio stations?

I know that Zuni, I believe, still has theirs up and going, but I know a lot of them lost funding when the government shut down so a lot of money was also cut through CPB funding which a lot of Native radio stations get their funding from which is the Corporation of Public Broadcasting. A lot of those funds were cut so a lot of the radio stations took the blow of that and they ended up either having to cut staff or they had to close. It was just a matter of how they were running their radio station and if they could create the revenue to keep it going.
Thank you so much for your time. We really appreciate you answering all of our questions.

Yeah thank you for calling.
Appendix B: KCIE

Hi, my name is Michelle Zayas and my teammate Lily Kurtzman scheduled a phone interview with you. And I’m working with another college student on a project related to broadcasting media. Would you be ok with being recorded and potentially published?

Ok

Great. We would like to know a little bit about your station. How did your station get started?

We've been on the air since December 3, 1990. I became General Manager last January. I've been here for 16 years. What happened was, it started off as, for the Jicarilla-Apache Nation, they had a video program and they looked into the idea of a public radio station. And they applied for a license with the FCC and, once approved, I know the gentleman's name was Carson [Inaudible] and he wrote a draft with the PTFT in Washington. And that's a grant to get the radio station started. They became Jicarilla Communications at the time. Once they were approved to get the grant and everything, I know that back then, in 1990, there were only like 15 radio stations. As of today I believe there are now 61 Native radio stations across North America.

Did you apply for a Low Power FM license?

Actually no. It was just a regular FM public radio station.

From the conception of the idea of a radio station, how long did it take to implement?

They were actually looking at some of the applications that they applied in 1987. They did some applications with PTFT, FCC and also the RLM, the Rural Land Management. So that's where the power site is. It's not on the Reservation, our power site is on Archuleta Mesa, which is the highest peak in north central New Mexico. But I know some of the applications, and it looked like they started the applications sometime in 1987. So 3 years later, we finally went on air.

Do you by any chance know how much money your station needed for an initial investment?

Not right off-hand. I know now we're kind of unique because most Native stations when we attend the NFCB, National Federation Community Broadcasters workshops every year, talking with most Native stations, they're fully grant funded, or they're with their local schools. The unique thing about us is that the Jicarilla-Apache nation gives us an operating budget as well as what gets paid for all the salaries for staff, and we also qualify for grants with CPB. We are grant funded also.

What is the mission of your station?

We play educational programming also so what we're trying to do here is, our mission is to get out education information, educational programming, and entertainment to our community. We also do language lessons and things like that, that we air every hour, at the top
and bottom of every hour. Monday through Friday we're doing Jicarilla-Apache language lessons.

How is your radio station supported? I know you said it was by your community and also by grants. Is there any other method?

We also do underwriting here, and we do a couple of pledge drives a year, usually we do one a year in the spring. Because our community is so small, the pledge drives don't bring in a lot of money. The majority of our funding is through grants.

If you don't mind me asking, how much money does your station generate, and how?

I would say, what we make, I would say we're around $10,000-$15,000 a year. That's the thing about what I was saying earlier. The unique thing about KCIE is that we do get an operating budget and everything from the Jicarilla-Apache Nation, as well as grant funding. So a lot of public radio stations I know really have to push underwriting in their pledge drives and that's the one thing we really don't have to push.

How many people does it take to keep your station running?

That's the thing that's real funny here. Most public radio stations have a full time staff of about 5 and the rest are volunteers. Because of our operating budget I have 11 full time staff members. Then, I've got maybe 13 volunteers.

What topics do you discuss on your station?

We cover everything. Health issues, we did local school stuff, we do mainly a lot of health issues. Our cultural issues, like the language lessons. Once a week we have different departments that come in. We do a talk show once a week that we bring in different departments. We'll have, for example, some nurses from the local clinic come in and talk about issues. We'll have our local police come in. Just different topics. We cover just about everything. Even our local council comes in and does overviews of what's happening in the Jicarilla-Apache Nation.

How do you select these topics?

Our News Director, Annette Martinez, gets emails from different people giving her suggestions and things like that. We give what the people want to hear.

Which programs have the highest amount of listeners?

That's really hard to say. I know we do some satellite programs like Native America Calling and National Native News, those are real popular. We get most of our listeners from 8-5. A lot of local businesses listen from 8-5. We do have music shows during that time also. We play everything ere, from Blues, Jazz. I would say our country and our old shows are the most popular ones.

Do you discuss prominent Native issues such as social, economic, environmental issues?
Yes. Once a week during that talk show, a lot of times, at least once a month, we have one of our council members come in and talk about things like that. He brings up a lot of topics that the council is going over. Like what's happening now with the Blood Quantum Meter, and their looking to see if they want to change it, maybe lower the blood quantum. One of our councilmen comes in and he's talking about that quite a bit.

How do you make sure not to offend your listeners when discussing these types of issues?

That's really hard to do. No matter what you think you offend somebody. We try to stay unbiased in all our opinions and not pick a side, but no matter what you're always going to have somebody that doesn't like what you're saying or what's on the radio.

Who would you say is your main audience-base?

I would say between the ages of 30 and 45.

How many listeners do you have per week or per month?

I would say we have a listening audience of about 2,900 people.

How often is your station on the air?

We're on air Monday-Friday, 6am-midnight. I have local people, and then we'll run our automation system on the weekends.

What exactly is that automation system?

The automation system is in your control room. Your control room is where you actually go on air. An automation system is run off the computer and you can build programs where it will play music, play specific programs, public service announcements, everything. It doesn't need anybody to manage it, you just put a program lock there, grab it from a folder, drop it into your automation system, and then you hit play and it can play for days. This year, we're rebuilding the radio station since I became General Manager, and so we've got a lot of new equipment. A lot of it is still being installed. We're just now getting the webpage up at KCIeradio.com. People can go there and hopefully within the next two months we should be streaming our station live through our webpage.

If you don't mind me asking, how much did the new equipment cost?

Last year we spent about $67,000 on equipment. So we're updating our internet system so that we're fast enough to upload the radio station signal. We bought new digital boards. The computers, automation system are all brand new.

How far does your station's signal reach?
We’re 100 watts, so we’re a small radio station. That’s why we were looking at upgrading, but there are other radio stations on the same frequency as us and we’re going to use the technology of today by using the computer and being able to stream the station live. Just to go back, you said you were making a website and looking into streaming? Yes. In fact, you can go to the website now. We have some stuff on there now. There’s a few pictures, and things like that. Being that we’re a public radio station now, what the CPB requires is that a lot of your financial information is on there. To qualify for the grants, you have to put on who’s on the governing board, the advising board, and who’s the General Manager and all the staff. All that needs to be posted somewhere.

You mentioned that you started out your station with video recordings, correct?

Actually, the program was called Jicarilla Communications and back then they used to do video and television on the local channel. Then they got into looking at increasing communication and looking at all avenues and then that’s how they got into radio. Since then, when the radio station was established, we kind of broke off into our own entity. There’s still Jicarilla Communications, which is a video program and stuff, but we’re off on our own.

You mentioned knowing some other radio stations. Do you know if Zuni is still running?

Yes, Zuni is still up and running.

Do you know of any other ones in New Mexico by any chance?

Yes. There's the Alamo radio station KABR, there's us. I think we're the only three Native radio stations. I know out of UNM, that's where Native Voice 1 comes from. Almost all Native American radio stations do programming through Native Voice 1. In Colorado, there is KSUT.

Thank you so much for taking the time to answer all our questions. Would you be ok with being contacted if we have any further questions?

That would be fine.
Good afternoon, Grey Hills Academy High School

Hi, may I be connected to the radio station?

Radio?

Yes please.

We don't have anyone in the radio station.

Do you not have a radio station?

We don't have anyone in there. I think it's just a recording that they put in. I don't know who manages the radio station. Let me transfer you to the Superintendent.

Ok thank you.

Hello

Hi, my name is Lily Kurtzman, and I am working with two college students on a project on broadcasting media. We saw on your website that you had a radio station that was run out of the high school. Is that true?

We went through some difficult times with the FCC. We're trying to get things back in order. We're working on getting it back to full operation possibly within the next several months. The funding got hung up by the federal government, and we're working on getting all of that [inaudible].

Got it. Thank you very much.
Hi, my name is Michelle Zayas. My teammate, Lily Kurtzman, scheduled an interview with you. Are you still available to talk?

Yes.

Would you mind being recorded and potentially published?

That's fine.

How did your station get started?

We started in 1967. Our station is part of a Mission that reaches in the Navajo Nation area. The Mission was already established with a church, and they wanted to start a radio station. So, one member started the first radio station that reaches the Navajo Nation back in 1967.

How long did it take to get started?

Well, I can't tell you exactly, but it was many years. It was a long process getting the permits and working with the government, the FCC, and also working with the Navajo Nation. So it was a bit of a process.

Did they have to go to a lot of Tribal Councils?

No. Here's the thing. We worked with the Tribal Council because the Mission works with them, but the actual physical station is about half a mile off the Navajo Reservation. So we weren't subjected to a lot of regulations that we would be.

How much money was needed for an initial investment?

Sorry, I don't know that.

What is the mission of your station?

The mission of the radio station is to reach the Navajo people with the gospel of Christ. We're unique in that there is now another radio station on the Navajo Nation, but we are the only radio station that is specifically Christian that reaches the Navajo Nation. We have Bible programs in the Navajo language. We have a lot of Navajo musicians bring their music, and we play their music in the Navajo language. Our whole focus is to reach the Navajo Nation. Now within that, there's a couple more tribes like the Hopi and Zuni tribes, but our main focus is to reach specifically the Navajo.

How is your radio station supported?

We are a non-profit commercial radio station, which is a unique burden in itself. We do have a little bit of commercials, advertising, but we're mainly supported through donations and things like that.
If you don't mind me asking, how much revenue does your station generate?

We generate about $100,000 a year.

And how do you generate that revenue?

About $40,000 is donations. We have fundraisers and those bring in about $20,000. We also have commercial advertising and underwriting type advertising.

How many people does it take to keep your station running?

How many do we have? Or what is the minimum we need?

Both.

Right now we have 3 full time people working here. They are supported from Churches and other areas. The station doesn't support them. So there are 3 full time people, and 5 part-time people.

Do you have any volunteers?

We have volunteers within the Mission that do things for the radio department as well.

Do you have any specifically within your station?

Yeah. Two of the DJs are volunteers.

You mentioned talking about religion is a big part of your station. Do you discuss other topics?

Yeah. We're a station, we have a public file, so we do public service announcements, we do community announcements, and we cover local sports. We're not just 24/7 Christian programming, we do a lot of different things.

Do you discuss Native issues, like social, environmental, or economic issues?

Yeah, we do. We have a program that is specifically brought to us by the Navajo Nation, where they discuss topics. So yes, we have a wide variety of things.

Which programs have the highest amount of listeners?

Our sports coverage has a very high amount of listeners. A couple of the Bible programs get the most listeners, and the morning DJ gets the highest listenership.

What time has the highest listenership?

Toward the 6am-8am.

Who is your main audience base?
Our main audience is the Navajo people, typically the elder Navajo people. 50+

How many listeners do you have per week/month?

I can't say, we haven't done a survey in a while. We're on the internet now, and a lot of people listen on the internet. But I don't have exact numbers of our listenership right now.

How often is your station on the air?

24/7.

Is there always someone in the booth?

We're automated, and we could be 24/7. But we turn the automation off for the shifts when people come in and just have them talk and be a personal station.

What technology do you use to keep it running?

We have software. We are actually changing our software. We have an automation system that pretty much keeps everything running. We're adding a music program that will keep things running. So it's just computer software to keep it going all the time.

How far does your station's signal reach in terms of wattage/mileage?

It reaches over 100 miles during the day, and we have low power at night. But we have three different stations, and between the three of them, they connect and reach over 200 miles.

You mentioned you have a website. How would you say streaming on your website influences listenership?

We're in a different area of the country, and our listeners are older, and it's not as affluent. That said, those who do have the internet do listen. It specifically helps listenership in those who have left the reservation and moved to Phoenix or Albuquerque. It helps those outside of our listener area who are Navajo and want to hear Christian Navajo programming.

That was all my questions. Thank you so much for taking the time to answer them.
Hi, my name is Michelle Zayas and I am working with 2 other college students on a project relating to broadcasting media. If you have the time we would like to ask you some questions about your station. Are you okay with being recorded and potentially published?

Sure

Great. My first question is, how did your radio get started?

It got started from Grassroots Organization from the People in 1973

How long did it take to get started?

About 5 years. Maybe a total of 10.

How much did you need as an initial investment to start your station?

It was all donated.

What's your current mission for your radio station?

We're community based, and our current mission is just to provide open communication for the Native people.

How many people does it take to keep your station running?

We need about 15, but we only have 5.

Are there volunteers?

Yes, we have about 8-10 volunteers.

How often are you on the air?

We're on every day, 24/7.

How far does your signal reach, as far as wattage or miles?

We are 100,000 watts.

You said it's running 24/7. What kind of technology is used to keep it running at night?

We play a playlist between 2am and 6am. The only time there's not a physical body here.

I noticed you have a website. Do you stream from your website?

Yes. Kiliradio.org. We've done streaming for about 12 years.
How do you think the streaming influences your viewership?

I think it's actually enhanced it, because we have about 40,000 people on our page.

How do you select topics?

It's just local things. Community people bring it to our attention, from the politics to the council meetings to prevention, intervention, different programs on diabetes, whatever's going on. Suicide prevention, things like that.

Which programs have the highest amount of listeners?

I really can't say. We always have a high amount of listenership. I would say early in the morning is the time that it's really high. Between 6 and 10 I would believe.

Do you discuss things like social, economic and environmental issues?

Yes. We cover everything from buffalo being on the road, to the XL pipeline, to whatever.

How do you make sure you don't offend any listeners when you discuss certain issues?

In what way do you mean?

I'm just curious if people would be offended by talking about, let's say, certain things like poverty or alcoholism.

No, because it's here. We can't not talk about it. So no, there's not a problem with it.

Who would you say is your main audience base?

I would say middle age to elderly.

How many listeners do you have per week or month?

In a month we can have over 300,000 listeners.

Just a couple more questions. How is your radio station supported?

Through grants and donations.

If you don't mind me asking, how much revenue does your station generate, and how?

We don't generate a whole lot. Maybe $200,000, from a small portion of grants, and the other is just gifting.

Thank you so much. It was great talking with you and I really appreciate you taking the time.
Appendix F: KTDB

Hi, may I speak with Barbara Maria?

Yes, this is she.

My name is Michelle Zayas, and my teammate Lily Kurtzman scheduled a phone interview with you today. Are you ok with being recorded and potentially published?

Alright. As long as I get a copy of it.

What is your role in the radio station?

I'm the General Manager for the radio station.

How did your station get started?

Back in the 70s, we were having a lot of problems in communication, and Ramah Navajo is in a small community area and there's no power, no electricity, and there's no real road. The school system and the community, it's a pocket of Navajos that are living out here and they were trying to get their students into a public school but there was no transportation and no communication, so one day the leaders of this community decided to get together and see if they could come up with a radio station. That's how KTDB was born.

Do you by any chance know how long it took to get started?

Probably about 3 or 4 years before it really got under way, and that's back in 1972 when the radio station was born.

Do you know what the process was for starting the station?

It went through a lengthy process. There is all kinds of things to get a station going, specifically for this community because everything that they do around here is too far away from our original city. One of the main reasons was that the parents could not communicate with each other and the other reason is they couldn't get their kids to a public school so they decided to work on a small community school. And when the school was built, they built in the radio station so the radio station is part of the education as an educational radio station, or a public radio station. So it took a while. It didn't start overnight. A lot of the community leaders had to take time to go and find funding, and go meet with different dignitaries. It just took a while before they could get it going.

Do you know how much the station needed as an initial investment?

I would say $250,000. Around there, maybe a little more.

What is the mission of your station?
The mission of our station is to communicate with our community. There's still a lot of people who don't live with electricity in their homes and so they use the radio to communicate with each other. When the school board is meeting, when the school is going to have some activities going on, and our mission is to communicate and try to educate the community on health issues, consumer issues, and then the daily news, what goes on in the world, in the US, outside the US. I'm trying to keep our little community--I think the population is around 3,700 Navajos and they listen to the radio station and our station broadcasts in about 75% Navajo language and 25% in English.

How is your station supported?

The radio station is supported by federal funding. We get funding from the Corporation of Public Broadcasting (CPB) and then some of it is from BIA, the Bureau of Indian Affairs. The rest of it comes from the local people that donate, so fundraising.

If you don't mind me asking, how much revenue does your station generate?

We really don't have a lot of revenue because the radio uses a lot of money. At the same time, we live 60 miles away from surrounding towns, so within the community people are really scattered out. They're not living within one little area where all the people are together. They're remote areas. at the same time, the people who live here don't have enough income, so we can't really generate enough revenue at all, so we live from year to year and try to stretch out money. We don't really have that revenue.

Do you have an exact number?

No we don't. I don't really want to go into that.

No problem. How many people does it take to keep your station running?

Right now, there's five of us, including myself.

Do you have any volunteers that work there?

We do have volunteers, and it's always open. So far we haven't had anybody in. We had some for a while, but they usually come and after a while they quit.

How does your station find volunteers?

They come in and want to look around, and get curious. Then they want to know how it operates and we give them a tour and tell them when it started, how long it has been, how many hours we broadcast. Some of them we go out and tell people. We haven't really had anybody coming around and it's open to anybody.

What topics do you discuss on the station?

We have all kinds of topics. We talk about health issues, as far as diabetes, high blood pressure, all kinds of health issues. We also do consumer heads, where how much interest is if you
borrow some money from this bank and all that. So there’s all kinds of issues. We have agriculture reports, weather reports, just like a normal public radio station. If you ever listen to a public radio station within your own area, that’s kind of how we do a lot of the broadcasting out here. Then we translate a lot of the stuff into the Navajo language.

Do you have any special topics? If yes, how do you select them?

Not really. The only thing that’s interesting is some people who live around here sometimes come from other states and they want to share their own programming and talk about certain topics and those are interesting. So we usually give them the mic and they share a lot of information with us too.

What programs have the highest amount of listeners?

Probably All Things Considered from National Public Radio (NPR). We usually get some of their stuff in the morning edition, and All Things Considered in the afternoon. So they’re popular. And within our own Navajo, we have topics that the four staff that I have, they do their own 15-minute program and a lot of those are popular. And they talk about all kinds of issues.

What times are these programs?

They’re all scattered throughout the day. We sig on at 5am and we sign off at 11pm at night. So it’s 18/7 year round.

Do you discuss social, environmental, or economic issues on the station?

Yes we do a lot of that stuff.

How do you make sure not to offend your listeners when discussing certain topics?

We just have to let the program director know, and if she has issues with it, I sit down with her and we discuss. If we can’t resolve it, then we go to everyone, and figure it out that way.

Who is your main audience?

Our main audience are local people who are Navajo. We also have people who only understand English.

Do you know the main age range?

I would say from 12 years old all the way up to 70 or 80.

How many listeners do you have per week or month?

I estimate anywhere around 2,000 per week

How often is your station on the air?
18/7 all year

How far does the signal reach in terms of wattage or mileage?

We have a 45-mile radius. It operates at 5,000 watts.

What technology is used to keep your station running?

We’re using streaming so we’re around the world. You can go on the internet and look up Ramah Navajo School Board, and under organizations you'll find KTDB and you can listen.

Is there always a person in the booth during all 18 hours you are on the air?

We have a schedule. We don’t hold someone in the booth for 18 hours. We do have a schedule and it's really rough, like on weekends we only have two people doing 9 hours a day each. So we’re short on staff. And that's why we need volunteers.

How would you say online streaming has influenced your listenership?

We do think that a lot of people are listening online, because we get calls from them and they want more information or they give us information to put on the air.

Thank you so much for your time.
Appendix G: Native America Calling

Note: We sent her an introductory e-mail

Are you ok with being recorded and potentially published?

Yes that's fine.

First question. How did your program get started?

We are reaching 19 years and so the program came from a need to have more Native American voices commenting on issues connecting to tribal communities, to culture, as well as hearing the Native voice on issues—mainstream issues as well. So the program grew out of that need and went from there.

The second question is what topics do you discuss on your show and how do you select them?

Well we talk about anything and everything connected to Native nations, and it really does become anything and everything. Officially the items that you might not think would be a Native topic but we’re able to ask that golden question of how does this connect to Native America, and so we maneuver through a variety of themes where we talk about current events, news items, culture, which also includes music and art, also language as well as history and tribal history even more specific. If you had to generalize those are some of the topics that we cover as well as law, and there’s so many ways you can categorize and there are these kind of main pillars that you can see if you were to take a look at our website and see our past archives of different shows, you’d see different topics or different themes that come up. Although those themes, they are extremely relevant to the day because populations are growing, people are asking more questions about how they can connect to this world how they connect to their past, and so it is very organic, it is very live and it is very vibrant because we’re talking with people and we’re talking about their lives and their history. And so it’s kind of hard to pinpoint and say we just cover this. Maybe you could say we cover things connect to Native America, well that’s just as diverse as saying we connect to anything that connects to life. It’s a very special and unique kind of approach that we get to take to look at how Native people are connecting to their lives, which also connects to their history and so it gets even more unique because we are able to open up the inner view/discussion to a national audience where somebody is in their home miles away and how they connect to the topics. They’re one phone call away from jumping into the conversation as opposed to other types of mediums where you read something online but that’s about all you can go with it. You may be able to make comments if it’s an online type of thing, but with the work we’re doing, we’re engaging into conversations with—people can have immediate line to them and so it grows the conversation or maybe even provides the opportunity for somebody’s perspective of something to be heard where in these other mediums you wouldn’t hear that and sometimes it’s been a celebrated moment where some of that information that’s being brought into the conversation is something that nobody knows about. Somebody had information or a connection to something that maybe they didn’t think was relevant and they heard the discussion and saw the missing hole of information and ended up calling in and it grew the knowledge of the topic or the given news item even
more. It's a very exciting and unique kind of intersection and so with that said, how do we choose the topics. Well, choosing the topics is almost as vibrant and diverse as our community that we connect with as well as cover, so it comes from everywhere. Sometimes it is something that is a reflection of things going on globally, nationally, tribally, and so sometimes it comes from there. Other times, there are specific times throughout the year that we know different Native communities connect to or participate in and so sometimes the topics are a reflection of those times. Sometimes the topics come from asking that question "Well what does Native America think about this?" And so sometimes that's the driver for a certain kind of topic. We do connect to the community in several ways, one of which is through our listening audience anyone is connects or is a fan of the show, they can also share with us about things that are going on in their community, what's important to them, what they are connecting to. We also have another layer that connects us to the communities through our tribal stations. That's another voice that feeds into it. We also take a look at what's going on in national media, tribal media, multicultural media, also alternative media and online media. We have our eyes on may different wires of news and information that's going out. It comes from a blend of all of those spaces. There's always something that's there or available and thinking of it in that way and giving you that long list of all the places it's really exciting to just consider what's going on in the news. What are people saying in social media. What is the relevance of this time in history in Native America. So a lot of it comes from there. And of course Native Americans have a direct connection to the federal government so sometimes that is a place where our topics come out. Even on the state level as well, there's a lot of times, a lot of transactions in what's going on in government that is connected to Native America. Sometimes just understanding what's going on in congress is also understanding what Native America thinks about the time. So it comes from a huge source of where we find different topics and deciding on them comes along with that.

It seems like there's a lot of social and economic topics. How do you make sure you're not offending any listeners?

That's a really good and important conversation because answering it is basically saying you are considering all of the people you're talking to and so our guiding light through it is to call on "journalism". Myself, I'm a trained journalist, and so we take that approach into the different items that we're talking about. When you enter into a circle of information or sharing information from that journalistic view, there are guidelines that you are giving a balanced opportunity for people to share information. It also means that you're doing fact checking, so when you take that journalistic approach into the different topics, you are doing a diligent effort to bring information that is there to provide information, and to ask the challenging questions. I think that is a very big part of answering that question. What do you do so that you're not offending people, it's never the mission to offend people but you do have to ask the challenging questions. I think when you do take that journalistic approach to it, you enter a whole other space of not necessarily not doing something because somebody may be offended. It's a guiding source that, if you're out there looking for the information, you are inviting people who are bringing a view, and you're balancing views. That's the space you're providing. I think being guided by that as opposed to the other. The other is up to a person's opinion of what is and what isn't. So, again back to the journalism, that's what we're doing here.
Do you use different types of internet media? For example, podcasts, video blogs... is that something you would look into using?

Yes, definitely. Native America Calling, when we sign on air, you're connecting to us for a full hour. At the top of the hour, also included in our hour is National Native News. They as a sister show, part of Koahnic Broadcast Corporation, they provide a podcast. So NNN is 100 percent podcasts. When it comes to our program, Native America Calling, we have several ways we connect with folks. We do have a sound cloud account, where people can download the day's show. We also archive our program on our website, so people can go after the fact and listen to it. Knowing that we're living in a world of technology where you can click, it being provided on our website, people who are savvy with technology know how to log in and hit the specific file and listen to the show. So it's not really 100 percent podcast that NAC is doing at the moment, we have plans in the future. It is one way to kind of get that podcast feel. If you have connection to the internet. We also do access online media, and sometimes incorporate some of that into our program. We also use social media to connect to our audience and incorporate some of the feedback that we get for the show, during the show, and after the show, into our on-air content. That's definitely one way. We are broadcast on over 60 stations in the US and a lot of those stations have a collection of sources where you can stream their broadcasts online, so when people are connecting to us, they maybe coming in through the door of their local station and all of the different kind of media that specific station has to give programming to an audience. So we mix in some stuff.

We saw you have an audience of up to about 500,000 a week. Do you have any information on the demographics of that audience?

I don't.

Okay. On your website, it said there were 52 radio stations, and you just said 60?

Yes. We're constantly growing. What's on the website may not be up to date.

How did you get your show on those stations?

Well that is definitely through the effort of our parent company as well as different classes that have been a part of the program. We also have a distributer, Native Voice 1. Currently, they are our connection to some of the radio stations. Native Voice 1 has a direct tie to a lot of these different radio stations. So that's one avenue. But it's definitely something that has been building since the beginning and so there is no one quick answer of how we connected to all these places. And, I don't have walking knowledge of the history of when a certain station signed on. But it is something that has been growing over the years. And if you wanted to get those specifics, it may be good to have that conversation with our parent company as well, Native Voice 1.

We will definitely look into contacting Native Voice 1, thank you so much. That was all my questions.

So let me give you a little background so things are accurate. Sometimes it gets mixed up when folks write about us. Parent company is called Koahnic Broadcast Corporation. That's kind of like the big umbrella. Under that is our program, Native America Calling. Also under that is
Native Voice 1 as well as National Native News, and a couple of other programs. That's our happy family. Then, Native Voice 1 distributes Native America Calling as one of their programs. We have over 60 places on the dial, is a more accurate way I guess to say that. There are stations that have repeaters, so there could be, if you look at a state, our show could be carried on maybe 5 places on the dial, but it's all under one station. So that's kind of where, if you want to be accurate, the best way to say it is on over 60 places on the dial. So those stations carry our program. The inaccuracy that often happens when people are covering it is that hey will give a certain station claim to our program. And that's inaccurate. And, we are on Mon-Fri, 1-2 e.s.t.. My name is Tara Gatewood, and I am the host and producer. I am from Isleta Pueblo and I am also Navajo.

Thank you so much for taking the time out of your day to answer our questions.
Appendix H: NNOBS

How did you get started?

The Navajo Nation Office of Broadcast Services (NNOBS) was created in 1974 to oversee the business of the commercial film and photography industry that takes place on the Navajo Reservation. The Navajo Nation Radio Network was established in 1976 as the original radio broadcasters for the Navajo Nation with 13 radio stations that bordered the Navajo reservation. Today, NNOBS is a three-branch station in Film, Television, and Radio.

How long did it take?

I imagine the services took about a year or less, in 1974 there had to be individuals knowledgeable in radio transmission and equipment purchases had to be made.

How much money did you need for an initial investment?

I don’t know exactly the specifics as to how much the start up cost was, but the initial investment came from the Navajo Nation and continues to be funded by the Navajo Nation to this day.

What is the mission of your station?

To always provide public mass communication services to the people of the great Navajo nation. Creating, producing, and distributing culturally aware programs and services that educate, inform and engage our audience.

How many people does it take to keep it running?

Currently, NNOBS has 5 full time staff members.

Do you have volunteers?

We do have volunteer help from media degree seeking students or students who recently graduated with a degree media and need a place to expand on their talents and skills. In addition, we also get a high volume of HS students during the summer who assist with our administrative needs and on location set ups.

If yes, how do you find volunteers?

Generally we work with the Navajo Nation Workforce Development, a job seeking entity on the Navajo Nation who looks for worksite for clients who are seeking job-training skills. Other times we find volunteers by word of mouth or previous interns/volunteers return for a period of time.

How often are you on the air?

Our radio station offers 10 Minutes of free radio programming. In 1986, KTNN Native Broadcasting became the primary radio entity and is a Navajo Enterprise. KTNN was generally a
game changer, today, NNOBS still operates a radio station in which we produce shows and send to our partner radio stations who then air it. Our partnership is called the Native News Network and we continue to partner with several radio stations around the Navajo Nation. We offer 10 minutes of free radio programming that is then distributed to the listed radio stations and they air it at their own time frames.

<table>
<thead>
<tr>
<th>Station</th>
<th>Frequency</th>
<th>Type</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>KABR</td>
<td>107.5 FM</td>
<td></td>
<td>Alamo, NM</td>
</tr>
<tr>
<td></td>
<td>88.1 FM</td>
<td></td>
<td>Alamo, NM</td>
</tr>
<tr>
<td>KTDB</td>
<td>89.7 FM</td>
<td></td>
<td>Pinehill, NM</td>
</tr>
<tr>
<td>KGLP</td>
<td>91.7 FM</td>
<td></td>
<td>Gallup, NM</td>
</tr>
<tr>
<td>KYAT</td>
<td>94.9 FM</td>
<td></td>
<td>Gallup, NM</td>
</tr>
<tr>
<td>KHAC</td>
<td>880 AM</td>
<td></td>
<td>Tse Bonito, NM</td>
</tr>
<tr>
<td>KWIM</td>
<td>104.1 FM</td>
<td></td>
<td>Tse Bonito, NM</td>
</tr>
<tr>
<td>KTBA</td>
<td>760 FM</td>
<td></td>
<td>Tuba City, AZ</td>
</tr>
<tr>
<td>KRMH</td>
<td>89.7 FM</td>
<td></td>
<td>Red Mesa, AZ</td>
</tr>
</tbody>
</table>

As for the NNOBS Television Station NNTV5, we are on air from 8-5pm.

How far does your signal reach? wattage? mile radius?

Each radio station we partner with carries their own information regarding signal, wattage, and mile radius.

What technology is used to keep it running?

We currently use microwave tower transmissions for our low power television and again, each radio station we partner with has their own specification.

Is someone in the booth the entire time?

Currently, we have one staff member, Flora Benn our Audio/Visual technician who produces the 10 Minute radio programs, but we do not live transmit any radio programs from our facility.

Do you have a website?
Yes, our website is www.obs.navajo-nsn.gov

Do you stream from your website?

We do not stream from our website but we do live stream our television production on Ustream. Quarterly, we live stream our Navajo Nation Council Sessions, we also have our own channel under NNTV5. Radio produced programming is downloadable through our website.

If yes, how does streaming influence viewership?

Ustreaming our television production of the Navajo Nation Council influences our viewership tremendously. Our government encourages transparency and our views look forward to watching our production live over the internet. We do not live stream our radio programming.

What topics do you discuss on your station?

The radio topic vary, shows can showcase community events and at times, traditional stories for the listening audience. One thing I forgot to mention, about roughly 90% of our program is in the Navajo language, only rarely do we produce English only programming.

How do you select these topics?

Ms. Benn actively seeks radio programming, she encourages people to stop by and get involved. Topics generally refrain from political influences but we do provide council updates and N.N. Presidential addresses. As long as it has a community purpose, is valuable information, etc., the topics will be produced.

Which programs have the highest amount of listeners?

Again, listening statistics would be dependent on individual radio station partners.

What time is this program?

<table>
<thead>
<tr>
<th>Station</th>
<th>Frequency</th>
<th>FM/AM</th>
<th>Location</th>
<th>Frequency</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>KABR</td>
<td>107.5</td>
<td>FM</td>
<td>Alamo, NM</td>
<td>88.1</td>
<td>2 x Daily</td>
</tr>
<tr>
<td>KTDB</td>
<td>89.7</td>
<td>FM</td>
<td>Pinehill, NM</td>
<td>12 PM</td>
<td>12 PM</td>
</tr>
<tr>
<td>KGLP</td>
<td>91.7</td>
<td>FM</td>
<td>Gallup, NM</td>
<td>12 PM</td>
<td>12 PM Friday Only</td>
</tr>
<tr>
<td>KYAT</td>
<td>94.9</td>
<td>FM</td>
<td>Gallup, NM</td>
<td>12 PM</td>
<td>12 PM Friday Only</td>
</tr>
<tr>
<td>KHAC</td>
<td>880</td>
<td>AM</td>
<td>Tse Bonito, NM</td>
<td>2 x Daily</td>
<td>2 x Daily</td>
</tr>
<tr>
<td>KWIM</td>
<td>104.1</td>
<td>FM</td>
<td>Tse Bonito, NM</td>
<td>2 x Daily</td>
<td>2 x Daily</td>
</tr>
<tr>
<td>KTBA</td>
<td>760</td>
<td>FM</td>
<td>Tuba City, AZ</td>
<td>2 x Daily</td>
<td>2 x Daily</td>
</tr>
<tr>
<td>KRMH</td>
<td>89.7 FM</td>
<td>Red Mesa, AZ</td>
<td>8-9 AM (Seasonal)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>---------</td>
<td>--------------</td>
<td>-------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KUTI</td>
<td>88.1 FM</td>
<td>Hopi, AZ</td>
<td>Related Topics</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Do you discuss Native issues including social, economic, environmental issues?

Yes, we encourage many informative topics for our viewing and listening audience.

If yes, how do you make sure you don’t offend listeners when discussing?

We often try to monitor discussions, for radio programming, Flora interviews guests, often our topics come from programs, organizations, etc. who have been recording with us for quite sometimes that they are already accustomed to the norms of the radio room.

Who is your main audience?

Audience demographics vary from station to station, but for both Television and Radio, we strive to provide programming for our Navajo speaking community.

How many listeners do you have?

The amount of listeners we have is really unknown as each radio station has their individual statistics.

How is your radio station supported?

Our Radio Station and Television station is supported by both the film permit revenues and general funding from the Navajo Nation. Our stations is under the Executive Branch and is considered a Navajo department working under a government entity. We have been generally funded by the Navajo Nation since 1974.

If you don’t mind me asking, how much revenue does your station generate, and how?

We do not generate revenue for the radio station, the station only provides programming to its partner radio stations. We do not charge for the services under radio. Revenue is dependent and varies on the intake of film permits we distribute and general funds availability. Revenue is also obtained by our television production services that the production team offers. They charge to produce DVDs for programs seeking informational videos. In time, we will begin looking into underwriting for sponsorship programming for our television shows, which will be a new branch of revenue opportunities.
Appendix I: Pueblo of Isleta Part 1

Lily: Hi, this is Lily Kurtzman. We set up an interview for today at 10.

Nathan: Hi

L: I just have some questions about the Low Power FM Radio permit. How did you decide you wanted to apply for one?

N: First it was how the library got involved. I went to school for audio production and my assistant, she helped run the KUNM radio station. Our summer reading program, we always try to incorporate some form of media. The kids wanted to do radio. Therefore Tara and I, we started thinking about it. We thought it would be a good idea to create some kind of radio station. That way, the kids would learn how to program, make video skits, stuff like that. One could do the news, one could be the program manager, and that way their parents could listen to the work in real time. So that's what we wanted to do. I mentioned it over at one of out director meetings and Kristen Anzara, who does the grants for the pueblo, she was working on a low power radio, a grant to give money to the pueblo so that we could use it for emergency broadcasts, school closures, office closures and stuff like that. Therefore, when she heard about my idea, we came up with a collaboration.

L: How many people total were involved?

N: I don’t know how many people Kristen Anzara had. I know she was working on her side, and it was just Tara and I from the library side. I didn’t even know they were working on it until I shared the idea. They talked about the governor mentioning something about interns. I put in the suggestions about locating audio production students and interns to help us with the summer reading program. I brought it up at the director’s meeting, Kristen was already working on her side. I don’t know how many people she had. I know that when she had to go to the Council, she had me go and support. There was her, another person, and I believe Andrew Teller, who is the Pueblo Treasurer. He answered the financial part. And I believe Isleta Business Corporation was putting money up for that as well. So I don't know how many people she had, we were just trying to make a radio station we could stream online. Because when I went to school at ENMU we did a radio station working with Comcast and they got to broadcast a radio station from the TV. So that's one way we’re looking at it, because Comcast is throughout the pueblo. But we came through with the low power FM radio station, and we thought that would be better.

L: Did you need community approval to apply for the permit?

N: I don't know. That would be all Kristen's input on that. I know the previous governor had the idea about that too. He wanted to start the whole radio station too for emergency purposes. I told him what we wanted to do. Then the new governor started, and that's when the continuation started. I don't know if they had to get approval, but I believe it was supported because they love the Tribal newsletter which comes out monthly, and the radio station would be more a daily thing.

L: What's the proposed mission for your station?
N: Our proposed mission was to introduce a new profession to the youth. Right now, a lot of the youth go to school but they don’t have the idea of going to college, pursuing a higher education. Four years ago, our library started focusing on programs that would get them thinking about going to school for certain stuff. It all started from a radio commercial I heard where kids would go for some graphic arts kind of programming and they would make a commercial. Our community members are not that fortunate however, and don't have that financial stability, so thought “why can't a program at the library have a foot in the door with the technology?” It started with the kids who came in and started making their own beats, like hip-hop beats and they started writing their own lyrics, so they started reading to increase their vocabulary. Then they made the phone, which was when they had a message for their parents, like if they were having a bad day it would let the parents know to leave them alone and let them cool down. They ended with a concert. Once we saw that, the support, and the kids started reading more and they wanted to go to school for art production, and that's when they started doing their video. So the mission is to introduce new professions, stuff that they never thought of. Right now they just go to school, finish high school, and then they go work at the Casino. Which is nice I guess, but I will wait for them to think about college, and when they get to college, they could go to school for journalism and stuff like that as well. And that's what we want to do. Get them to think about life beyond the casino. Like working for the pueblo, or going to school and coming back to help improving the community. That's our mission. We never put our mission statement together.

L: How many people do you expect you'll need to help run the station?

N: I don't know. Originally we were thinking we would do a 6-7 week summer program and if they liked it, we would make it into an after school program that way they could pre-record the show. Then, every time we begin, we would play it. Then, after school they would come and work on it again. I guess, whoever would want to do that, that's what we're thinking. We just want to do the summer program, but Kristen was saying that we would get a real good time slot and that we have a good idea, so we're pretty sure it's going to go beyond the seven weeks we had originally planned. And we're fine with that. We have a great team-base. And if we can keep them occupied, doing something other than getting into trouble after school, especially for those who are not in sports -- this is not an extra-curricular activity kind of deal.

L: Do you hope to have volunteers?

N: Yes, I would love to have volunteers. I would like to get the interns from UNM or any other colleges around. People who have other indigenous people in radio broadcasting. That way they could come and help us out. Even from the journalism part, if they wanted to come and report news. I would welcome that.

L: Do you know what kind of programming you plan on broadcasting? What kind of topics?

N: I don't know what Kristen's programming is. I think she said with the low power we would have about four hours daily, and of those four hours [the library] would get an hour or so to do whatever. From there, we would do the segments by the kids. The skits, writing commercials, because they are creative. We had a graphic novel workshop, and the kids came in and they made a little novel graphic novel anime. If you go to our YouTube channel, they made their own TV commercials and music videos. They made their own "how-to cook" videos. So they've got their own little creative so that I would like to tap into, and let them know how to use their imaginations to make sound effects and stuff like that. We'd also like to get them to do
journalism. Basically I would like for the teens to have a voice. Right now, the teens do either sports or, the ones who are more financially stable, are in music classes. The rest come to the library. It would be nice to do programming that they would be interested in, that they would like to put their heart into, and saying that they did it.

L: Do you plan on playing any cultural programming?

N: Yeah, it would be nice. As far as the community, they're very protective of their culture. Even here at the library, we're not allowed to have materials that has anything about the culture or the songs. If you want to learn about the songs or the culture, they want you to go down into the village and learn the traditional ceremonies and participate. That's the way they want you to learn. They had a person come and participate, and that person wrote a book. Therefore, they want nothing to be printed, nothing to be recorded. If any community member does that, it could lead to banishment. They will probably play the music that's been published on CD's, but nothing from the actual pueblo. Nothing from Isleta, unless the tribal leaders say it's ok.

L: What kind of audience are you hoping to attract?

N: It would be for anyone. We serve everyone from children still in the womb (working with their mothers) to the elders. The elders come up here once a month and utilize the library. I would like to do a program that has information for everyone. At the same time, the teens would be running it.

L: How far do you expect to be broadcasting, in terms of wattage or mileage?

N: I think they said about 10 miles. They would like to get the entire pueblo.

L: What type of equipment do you think you'll need?

N: I don't know. When I worked at the school in eastern New Mexico, they had just converted from vinyl to CD's, and that was 10 years ago. KUNM I believe still uses CD players. I'm not sure if they use mp3s. I'm assuming it would be mp3. If it's on CD or vinyl, we have the ability of ripping it to a digital format now. I'm thinking a computer, or a couple computers. It's been a while since I've been in an actual radio station.

L: Do you plan on setting up a website?

N: I would love to. The whole social media. A website, maybe a twitter page, Facebook page, something that has that interaction. We do that here at the library. It would be nice to have an app where people can stream the programs onto their phones even from a distance. That way we could get community involvement.

L: That was all my questions. Thank you so much for taking the time to answer all of them.
Appendix J: Pueblo of Isleta Part 2

L: I talked with Nathan, and he answered most of our questions. He said you were the one who dealt with the application process.

K: To a certain extent, yes

L: Can you tell me about the application process?

K: Actually, the way the Pueblo found out about it was from an email from, I can't remember which group it was, but they had very close connections to the FCC. And they were giving an opportunity to get Native American Tribal organizations to respond to their request of filling out an application for a LPFM station. And that's pretty much how we came about hearing this potential opportunity. The application process itself though, because there's a lot of technical requirements as far as finding a channel that may be available within the area, we needed some technical assistance and the Pueblo actually was recommended a consulting firm, and we actually went ahead and we paid them a small fee to go ahead and help us build our application.

L: Do you remember the name of the group that sent the email?

K: Off the top of my head, I do not. It was actually, if I'm not mistaken, the email actually came through to my office was through the Isleta Business Corporation. And again, I'm not sure specifically how they came up with it, but because there are particular requirements as far as who is eligible to apply for an application, because that particular program under the pueblo is a for-profit entity, they were ineligible to apply. A LPFM station obviously is for non-profit organizations. So that's how it got diverted to my office, being that the Tribal programs themselves are more non-profit. Honestly right now, I don't have who it originated from.

L: Did you need community approval from the pueblo before you applied?

K: Yes we did, only because of the way the pueblo here is structured. Any big decisions such as this one that could possibly have a lifetime opportunity, we usually do seek the advisement and guidance from our governing body, which is our Tribal Council. We make every effort to 1) advise them on potential opportunities, and 2) get their support to determine whether or not this is something that they feel will be a benefit to the Tribal community. So yes, we do have to seek their approval, and it was very simple. Educating them on what the LPFM station was, what the advantage would be to the Tribal community, how the pueblo itself will be able to utilize this kind of system. They then saw the advantages to it, and they provided us with the support to proceed with the application process.

L: Do you know if the fact that Isleta is a sovereign nation changed the application process?

K: From my understanding, yes it did. We started contacting some of the representatives that work with the FCC. They were very helpful in the area to really educate Tribal communities as to why they were making the big push to try to get Native American organizations to apply. It was my understanding that the last time it was an open window opportunity was back in 2002 maybe? So it had been some years since the last chance of trying to obtain a LPFM station was available. And they apparently had made some changes to the requirements giving priority and
preference to Native Americans. So I don't know exactly what the regulations were many years ago, but obviously over the time things have changed to where they were trying to make every effort to get LPFM within the communities of the Native American areas.

L: Why the huge push?

K: On their end, I'm not sure. For us, it was a benefit because we apparently did not have to go through the long phase of the application process. We were able to actually eliminate some steps so pretty much as far as the applicants who were non-Native, they actually had a lot more strict requirements. They had to go through more in-depth evaluation before making it to the phase that, when we applied, we were automatically bumped into. So there were multiple evaluation phases prior to where the Pueblo sat when we applied. So they gave benefits to Native American communities where, if they applied, they didn't have to go through the long phase of evaluation. They got bumped into phase 2 of the evaluation process I guess you could say. We didn't actually have to start along with everybody else. Of course, those were usually organizations that may have been state-based type organizations that were seeking the same opportunity.

L: When you say that you got to skip some steps, is that what you are referring to when you say you got to go straight to phase 2?

K: That's correct. My understanding was that those that met the Native American requirements, they got put into one pool, and everybody else who did not meet that criteria had to go through a more in-depth evaluation process and so were put in another pool. At some point, those two came together.

L: Do you know how much the initial investment for the station is/will be?

K: At this time, we don't. Again, talking roughly with some of those that already have worked with the FCC as far as low power, it really seems to be dependent on what the expectations will be of the Pueblo. I've heard that they can be very minimal, talking about maybe $6,500, but again the price can go up based on what the Tribe wants to do as far as equipment usage. Obviously there's places where we could probably get slightly used equipment, but again if the tribe wants to go ahead and utilize new equipment, obviously there will be a price difference. So based on our work with the application consultant, they're looking at anywhere between $10,000 possibly up to $25,000 to really get this station up and going. The benefit that the Pueblo had was that we actually have one location that became a vacancy area, and it was determined that might be a potential spot to actually have a radio station, so for the most part, I don't think we have a high dollar investment, being that we can utilize a lot of our existing resources now. Like I said, it's a great opportunity. We're still in the planning phase because our chance was really the whole application process. As you know, putting in an application doesn't always guarantee it's going to be a go. It's pretty much a 50/50 chance that you take. The Pueblo itself went ahead and took the opportunity because the primary focus was being able to utilize this mechanism as a way to outreach to our community. We're a small sized Pueblo, and people are always asking "how do I get information on what the tribe is doing?" so that was really one of our biggest benefits to apply. After we did our research, we actually have another program here on the reservation, a language program. And we just thought this would be the best
L: You mentioned that it's a 50/50 chance of getting the application accepted. Has the application been approved? Will Isleta be building this station?

K: As of March of this year, we officially received the construction permit, which is what determines if our application was accepted. From March, based on the terms and conditions, the Pueblo has 18 months to go live with the radio station. So FCC has approved the Pueblo. Our request was actually for two radio stations, and we have been approved for both. So we are in the strategic planning phase right now, as far as really deciding if our site location is going to be the most feasible area. We have our Isleta Business Corporation really giving us a big hand as far as the investment part of it, helping us to come up with the cost. They have an agreement that they would be willing to help donate to really get us up and going. So hopefully we won't have to request a time extension, because I know that is an opportunity to really go live with radio stations, but for the time being, we have 18 months to actually get it up and going, and we are right now in the planning phase to really decide what it is we are going to utilize this opportunity for as far as considering how we are going to use the airwaves, what we are going to put out there, how are we going to structure it. We're very excited about it, but it is an investment for the Pueblo. It is a big stepping-stone, because we really see this as being our guinea pig. The Pueblo has had an interest in the commercial side of radio, but without having any experience or knowledge as to what it would entail to run a radio station, this is one of the opportunities that we thought would be a benefit before jumping in too deep and going commercial. Obviously, that one takes quite a bit of an investment to establish, so this is our first opportunity into the media sector of radio stations. Hopefully it will be a success.