



# **The Free Network Foundation**

**2013  
Annual  
Report**

# LETTER FROM THE EXECUTIVE DIRECTOR

Friends of the Movement,

It has been another momentous year. Looking at how far we've come, the amazing friendships we have built, and the seeds that are germinating in front of our eyes, I am filled with gratitude and joy.

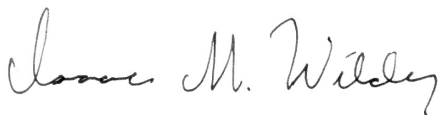
Last year saw the birth not just of new communications networks, but of new human networks. Our community of practice is vibrant and growing. For all that was accomplished in 2013, we can be sure that 2014 will be only more eventful.

What we know for sure is that persistence is the key to success. The events of the past year have shown us that now, more than ever, we must remain dedicated to the cause of free networks and free society.

In the year ahead, we have many challenges to meet -- some new, and some old. While this document is a chronicle and celebration of what we have achieved, this is not the time to rest. This is the time to boldly advance, to gain efficiencies, to invent, to lead, and to grow.

Thank you for being a part of this movement, and for enabling us to do the same. We cannot do this work without your support. Network freedom is the issue of our age, and we all have the opportunity to tilt the balance. Consider how you can best contribute to the cause in the coming year, and know that we will need your help.

with humility and thanks,



Isaac M. Wilder  
Executive Director, the Free Network Foundation

# ABOUT THE FNF

The FNF was founded to steward the emergence of free networks. Our activities in research, development, advocacy, and outreach are predicated upon the idea that unfettered access to information is an essential element of any truly free society.

## OUR VISION

We envision a world where communities build, maintain, and own their own share of the global computer network.

## OUR MISSION

The Free Network Foundation is a nonprofit organization that provides operators around the world with essential infrastructure for the realization and support of free networks. We engineer tools and develop educational resources to facilitate the deployment of resilient, responsive, and accessible networks.



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# 2013 IN REVIEW GROWING NETWORKS

## KANSAS CITY FREEDOM NETWORK

In August of 2013, the FNF came together with local partner organizations to form the Kansas City Freedom Network (KCFN). The KCFN is made up of the FNF, the Black Economic Union, Connecting for Good, the Mutual Musicians Foundation, and Reconciliation Services, and we expect that more individuals and groups will join us as the network expands. The KCFN cooperatively governs the network in Kansas City.

Members of the KCFN coalition have been meeting regularly to discuss policy and governance for the network, as well as how to expand it organically and responsibly. On August 27th, a press conference held at the MMF announced the launch of their network. You can learn more about the KCFN at [www.kcfreedom.net](http://www.kcfreedom.net)

*2013 saw a significant expansion of free networks in Kansas City and Austin. In KC, we worked with our coalition partners to build networks with the goals of bringing more people online, especially first-time Internet users, and building a network backbone that will enable organic growth through the city.*



*Isaac Wilder and Zion Dixon inspect an antenna at 17th and Summit*

## AUSTIN FREE NETWORK

In fall 2013, we installed the first nodes of a mesh network in Austin, TX for a local housing cooperative called Lareunion Co-op, near 183 and Lamar. Charles has been working with the cooperative to set up the network and train operators there. We continue to observe the network's performance closely and to help its users grow it and spread the connectivity. Charles has also been coordinating with technologists and groups in Austin, including Austin Meshnet, LOPSA Austin, and folks experimenting with high altitude balloon based networks.



# 2013 IN REVIEW BUILDING COALITIONS

## CONNECTING FOR GOOD

The FNF continued to support Connecting for Good's network at Rosedale Ridge, and helped them to build a network at Posada del Sol, a subsidized apartment building for seniors in KCMO. The Posada site connects more than sixty housing units, the surrounding neighborhood, and serves as a relay to Rosedale Ridge. We also supported Connecting's network at Juniper Gardens, Kansas' largest housing



*Isaac and Clint installing KCFN gear with Dan Harmon and Rick Deane of Connecting for Good.*

project, located in KCK. The network at Juniper Gardens connects 390 units to the Internet, and while it was constructed using donated equipment running non-FreedomStack software, we plan to work with the residents to make the network FreedomStack compliant in the spring.

## MUTUAL MUSICIANS FOUNDATION

We have been talking with the Mutual Musicians Foundation about building a network since the FNF's move to Kansas City, and we're pleased to announce their network went live last spring. The MMF is a non-profit organization that runs the world's oldest jazz house on the East Side of Kansas City, and works to preserve the musical and cultural heritage of the area. The MMF's network also serves the Black Economic Union of Greater Kansas City, located nearby in the 18th and Vine St neighborhood.

The network has already supported cultural activities such as the celebration of Ben Webster, and we're working with the MMF to bring their vast trove of cultural and educational content online with the

KCFN where it can enlighten the greater community. We additionally helped the MMF to file an application for a community radio station, which we hope will be approved and will offer possibilities to enrich the KCFN and vice versa. We continue to work with the MMF to help them host their content locally, and to



*Isaac and Clint with Rashonda and James of the MMF, working on a KCFN install*

develop education programs for network operators, with the eventual goal of expanding their network into the surrounding community.

# 2013 IN REVIEW PLANTING SEEDS

## RECONCILIATION SERVICES

Last spring, the FNF worked with Reconciliation Services to build a network at their East Side KCMO headquarters. Reconciliation Services (RS) is a religious nonprofit that provides emergency assistance and therapeutic services to individuals and families in the Kansas City area. The network build was funded by a grant the FNF received from the Community Capital Fund, a Kansas City non-profit organization that funds neighborhood capacity building initiatives in historically under resourced and under invested parts of the metro. The network, located at 31st St and Troost Ave, serves their building as well as the highly-trafficked bus stop on the corner, and will enable the spread of connectivity to large areas of the East Side. It is part of the KC Freedom Network, and is also supported by Connecting for Good, who have since moved their offices to RS' building.



*KCFN installation at St. Mary's of Egypt, 3101 Troost*



*Isaac working on KCFN installation at the Lincoln Building, 18th and Vine*

## FUTURE PARTNERS

In the second half of 2013, the FNF and Connecting for Good delivered engineering and feasibility studies for expanding the KCFN to three prominent Kansas City organizations: Kansas City Public Schools, the Urban Neighborhood Initiative, and the Upper Room. All three studies were very well received, and we continue to work with all three organizations to help them sow seeds for community networks around Kansas City.



# 2013 IN REVIEW TEACHING PEOPLE

## HACKER DOJO

In 2013, we worked with the Mutual Musicians Foundation and other KC partners to develop education programs for members of the communities served by the KCFN. The Hacker Dojo program aims to educate teenagers from Kansas City about advanced computer skills, and how to build and fix free networks, as well as about jazz and the cultural heritage of KC. It is our hope that the Dojo will mark the start of a free network in KC that is truly self sufficient and capable of growing organically. During 2013, we experimented with pilot programs and developed a curriculum, and we plan to accept the program's first official class of students this summer.

## FNF AND THE ARTS

In September, we collaborated on a celebration of legendary jazz saxophonist Ben Webster, with the MMF and the Society for the Prevention of Unnecessary Demolition (SPUD). Webster, who grew up in the East Side of KC and played in the MMF's building, is still renowned by jazz lovers as one of the all time great tenor saxophonists, though he is far less known in Kansas City than other native jazz musicians like Charlie Parker. The Ben Webster project was part of a yearlong campaign by SPUD to highlight the great historical and cultural value of physical places around Kansas City's urban core before they are lost forever.



*James Hathaway Sr. outside the Mutual Musicians Foundation*

The FNF worked with SPUD to conduct and record a video interview and jazz performance with the Ben Webster Foundation in Copenhagen, Denmark, where Webster spent the final years of his life. The interview was conducted using the KCFN, and we think it was an excellent demonstration of the power of connectivity to bring people together across great distance, and to get Kansas Citians engaged in the oft-forgotten history of their own city.

In September the FNF participated in Station to Station, a public art project by Doug Aitken involving a cross-country train trip and video recordings/live performances of cultural figures and groups they found interesting along the way.

# 2013 IN REVIEW ADVANCING TECHNOLOGY

## PROGRESS ON FREEDOMSTACK

We've made a lot of progress on our technical goals, including the development of AutoNOC and Autotunnel, two services that help



Isaac with Pau and Roger of guifi.net at the MMF

manage free networks. Prototypes of both systems are currently functional in our labs, and will be deployed to KCFN and other allied networks in the coming year.

We have transitioned the firmware on the KCFN to qmp, in preparation for an eventual transition to LibreMesh. qmp has increased and stabilized performance on the network.

In Austin, Charles has built out FreedomLab, a networking laboratory where we can test and improve our networking technologies. A diverse array of wireless gear, datacenter networking hardware, and remote access technology will allow anyone with network access to conduct realistic mesh network experiments. The lab is currently for internal use, but will open to interested hackers in the coming year.

## LIBREMESH

Conversations between some of the world's leading free network communities have recently led to the emergence of the libre-mesh project, to develop a set of tools that facilitate the deployment

of Free Networks on any community in the world. We are proud to be a part of the LibreMesh team, and glad to have found an experienced team of firmware hackers with which to collaborate.

Other groups involved in the project include guifi.net from Catalonia, AlterMundi from Argentina, and eigenLab, from Italy.

## DEVELOPING GUIFI.US

At South By Southwest (SXSW) in March 2013, we debuted a tool called guifi.us, a web platform enabling communities to plan, provision, and fund their own cooperative ISPs. Guifi.us, inspired by the work of our free networking friends in Catalonia, will include mapping and RF planning features, community support for selected hardware platforms, tools to determine how best to backhaul networks, and a crowdfunding tool for communities to raise funds for network building. The project aims to catalyze community wireless projects by providing decision support and organizing tools. CIO James Yox is spearheading development of the project, currently in pre-alpha stage.



# 2013 IN REVIEW CASTING VISION

## IS4CWN13

In early October, Isaac spoke at the International Summit for Community Wireless Networks in Berlin, Germany. He gave a talk entitled, "Measuring and Optimizing Network Performance," alongside Thomas Huhn of the Technical University of Berlin. Isaac also attended the Circumvention Tech Summit that took place in the days before the main event.

Following the IS4CWN, Isaac traveled to London to meet with Jefferson Hack, co-founder of Dazed & Confused, a style and culture magazine. Hack and Dazed, who covered the FNF in their June 2013 issue, are supporters of the Free Network Movement, and worked with Isaac to explore possible avenues of collaboration and help the FNF to craft a press kit.

## IMPROVING THE NCL

The Network Commons License (NCL) went through further iteration this year, bringing it a step closer toward an enforceable document. The NCL aims to govern the use of free networks, much like the GPL governs the use of free software. It is a living document and we encourage all feedback. The NCL is available at [https://commons.thefnf.org/index.php/Network\\_Commons\\_License](https://commons.thefnf.org/index.php/Network_Commons_License)



*Gordon Cook at the Castell de Montjuic in Barcelona*

## COOK REPORT

The FNF and guifi.net were the subject of extensive, in-depth study by journalist Gordon Cook. The Cook Report on Internet Protocol is one of the longest running and most respected newsletters on the development of the Internet.

Cook's work represents the most comprehensive and insightful coverage of the FNF's activities to-date. While access to The Cook Report is usually on a subscription basis, Gordon has agreed to make his report on Do-it-ourselves networking available to the public at no charge.

The report is available at: [http://staticbits.thefnf.org/FNF\\_Cook\\_Report\\_DIO\\_Wireless.pdf](http://staticbits.thefnf.org/FNF_Cook_Report_DIO_Wireless.pdf)



# 2013 IN REVIEW EXCHANGING KNOWLEDGE

## GUIFI.NET

This last year, we were incredibly fortunate to have the opportunity to meet with members of guifi.net both in Kansas City, and their native Catalonia. The FNF are huge fans of guifi.net and their brilliant work in building and maintaining the largest free network in the world, currently consisting of over 20,000 nodes, and we learned much from them when Isaac visited Catalonia in May, and when Pau and Roger from guifi.net visited Kansas City in August.

In May, Isaac traveled to Europe on a European Commission grant secured by guifi.net, along with Gordon Cook, a journalist who has written on the FNF. Several weeks in Catalonia, two weekends in Berlin, and almost a week in London offered the opportunity to engage with the leaders of Europe's foremost free networks. A well-timed visit to Spain by members of Argentina's AlterMundi made the exchange a three-continent summit. Isaac also attended Wireless Community Weekend in Berlin.

Three months later, we were visited in Kansas City by Pau and Roger from guifi.net. They helped with an

upgrade of the KCFN, and contributed their expertise to a network feasibility study of the areas around Lincoln College Preparatory Academy, and the Kelly Center, both in KCMO. Thanks to their help, the KCFN is now a fully routed network, running the qmp firmware. After their time in Kansas City, Isaac accompanied



*Pau and Roger of guifi.net, exploring Arches National Park*

Pau and Roger to Oakland, CA, where they met with hackers from Sudo Room, a group that recently built a free network in the East Bay. The trips marked a deepening collaboration with guifi.net and their massive free network project.

# 2013 IN REVIEW STRENGTHENING THE FNF

## WELCOMING CLINT

Last spring, the FNF welcomed Clint Wynn as our new Director of Education. A Kansas City native with a lengthy history in technology as a developer and consultant, Clint is helping the FNF implement educational programs to train users and

operators, and with community building. Since October, Clint has also been working with coalition partner Connecting for Good as Director of Community Outreach. He continues to provide invaluable support to both organizations' missions of training operators and technologists



*Clint Wynn and Zion Dixon at the FNF's new offices in Kansas City*

in KC, and to coordinating the FNF's and Connecting's efforts.

## NEW OFFICE

In January, the FNF moved into an office space in the West Bottoms, an industrial neighborhood in Kansas City, MO. Having a dedicated office space has helped us build network devices, hold meetings, and maintain a better workflow. Our postal address remains the same as before.

## STRIVING FOR TAX EXEMPT STATUS

We have remained in communication with the IRS about our application for 501(c)3 tax-exempt status. Last summer, we responded at length to a number of questions they raised on our application, and are awaiting further response from them. We are excited to be moving towards tax exempt status. If you would like to view their questions, and our responses, not only are they a matter of public record, but they're on our wiki at:

[https://commons.thefnf.org/index.php/IRS\\_Application](https://commons.thefnf.org/index.php/IRS_Application)

## NEW WEBSITE LAUNCHES

Early last year, the FNF launched an overhaul of our public web properties, designing a custom WordPress theme in order to make it easier to find information, and establishing a uniform user experience across all of our sites. We've been working since then to improve the site, and we appreciate any feedback to make it more effective. The FNF's website can be found at [www.thefnf.org](http://www.thefnf.org)

# FNF IN THE NEWS



"Free(ing) the Network: Questions and Answers with Isaac Wilder," Citizenweb.is, 31 January 2013.

"The Free Network Foundation: an Interview with Isaac Wilder," Purple Fashion Magazine, vol 3 issue 19, Spring Summer 2013



"Network Free KC," Harpers Online, 20 March 2013

"Google's Super Fast Broadband Service Is Growing, But Not Everyone is Happy," Motherboard.tv, 20 March 2013



"MUST READ!!! KANSAS CITY GOOGLE FIBER PO'FOLK FREEBIE ALTERNATIVES!!!" Tony's Kansas City, 21 March 2013

"Free Your Network," Dazed and Confused, vol 3 issue 22, June 2013, p. 60.



"Free Network Foundation," part of Station to Station, a public art project by Doug Aitken, 2013.

"Operación: resetear la Red," El Diario, 21 August 2013.



"'Mesh' Your Way to a Safer Internet," truthdig, 22 August 2013.

"Broadband Gap," TheVerge, 11 September 2013.



"Nonprofit effort offering free web access to Jazz District area residents," KCTV5, 18 September 2013.

"How to Keep the NSA out of Your Computer," Mother Jones, September/October 2013.



"Home Wireless Network Keeps the Snoops Away" New York Times, 14 November 2013.

"Interview with Isaac Wilder," What's Up Kansas City, 21 November 2013.



For more stories of FNF in the news, please check out <http://commons.thefnf.org/index.php/Clippings>



# THE YEAR AHEAD

As we move into 2014, the stage is set for the full-scale, real-world deployment of the tools we have developed. Steady, strategic progress has brought us to a point where key community and capital resources are aligned behind the concept of free networks.

## NCL

This year's winter summit, to be held in Austin, TX March 7-10, will focus on finalizing and approving the revisions made to the Network Commons License over the course of the past year. Once this new draft is finalized, the FNF will solicit counsel to help turn the NCL framework into a legally-binding license agreement.

## Free Networks in the Wild

The seeds that we've planted in Kansas City are beginning to bloom. Over the course of the next year, we expect the Kansas City Freedom Network to expand drastically, challenging conventional wisdom about how telecommunications infrastructure should be run, and serving as an example for the rest of the nation. Allied efforts in Austin, Los Angeles, Oakland, and elsewhere are rapidly progressing, and will experience significant growth in 2014.

## Global Solidarity

In 2014, we will take our efforts at coalition building and international cooperation beyond the exchange of ideas, into the realm of meaningful technical and political collaboration. In addition to strengthening our ties with guifi.net (Catalonia) and altermundi (Argentina), we will expand and formalize a coalition of second-wave free network activists.

## AutoTunnel, AutoNoc + guifi.us

While the FreedomStack network appliances have reached a state of relative maturity, the suite of related software for security, monitoring, and planning has yet to be deployed in the wild. In 2014, these tools will be finalized, tested, and used in earnest to support the growth of free networks.

## Documentation

We wish we could say that our work speaks for itself, but unless it is properly documented and disseminated, it cannot. In the coming year, we will redouble our efforts to provide, accessible, remixable, high quality documentation of everything from our technology to our organizing techniques to our core philosophy.

# PERSONNEL

## BOARD OF DIRECTORS

Isaac Wilder (Chair)  
Gregory Foster  
Patti Wyble  
Tyrone Greenfield  
Martin Dluhos

## OFFICERS

Isaac Wilder, Cofounder and  
Executive Director  
Charles Wyble, Cofounder and CTO  
Tyrone Greenfield, COO  
James Yox, CIO  
Clint Wynn, Director of Education

## ADVISORY BOARD

John Stone  
Jon Lebkoswky  
Jeff Sterling  
Paul Garrin  
Devin Balkind  
Richard Stallman  
Gordon Cook  
Jeff Michka



*Tyrone Greenfield at work*



*James Yox and Charles Wyble, hacking like mad*

## AND MANY THANKS TO OUR TIRELESS VOLUNTEERS

Patrick Anderson  
Anna Armstrong  
Bob Armstrong  
Devin Balkind  
James Boothe  
Pablo Jose Varona Borges  
Nick Daly  
Anita Dixon  
Zion Dixon  
Martin Dluhos

Marcus Eagan  
Elise Gallant  
Patrick Gibbs  
Dylan Gumm  
Charlie Gunzelman  
James Hathaway,  
Sr  
James Hathaway, Jr  
Mike Hoey  
Harlene Hipsh

Sophie Klein  
Jeff Leep  
Adam Longwill  
Hudson Luce  
Joshua Mercado  
Bryan Newbold  
Travis Newton  
Steve Price  
Maria Lach Smith  
Asa Wilder  
Harris Wilder



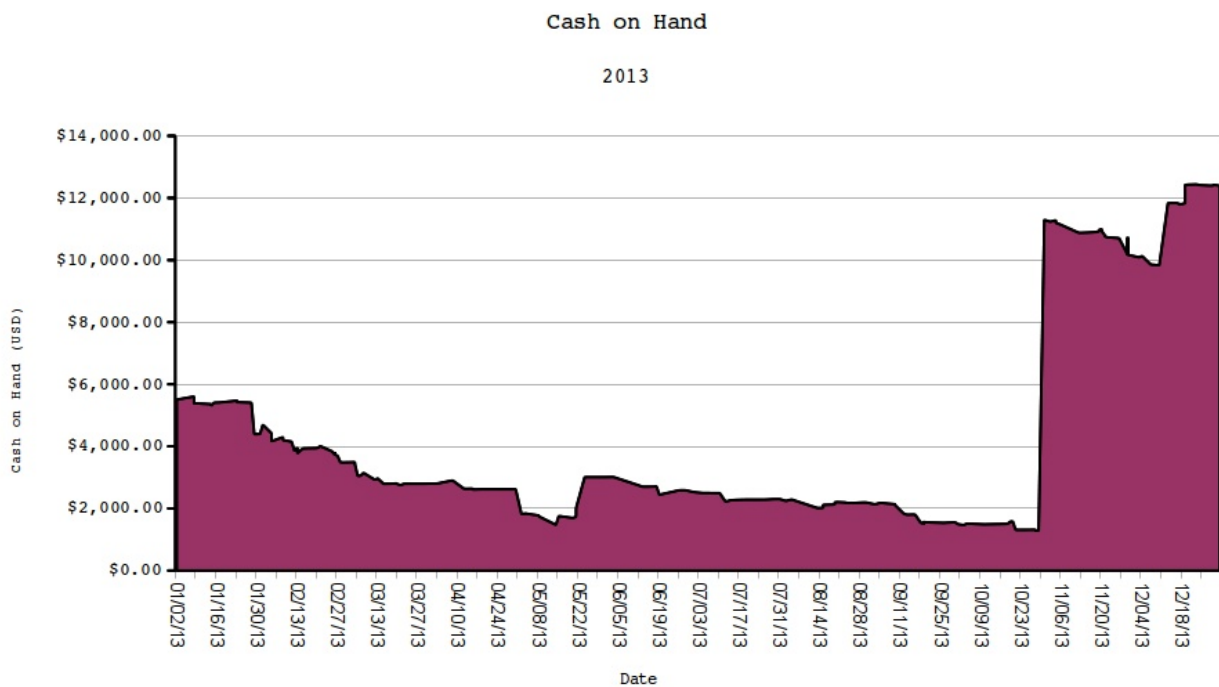
# FNF FINANCIAL REPORT 2013

## SUMMARY

From January 1st, 2013, to December 31st, 2013, the FNF took in a total of \$16,912, and spent a total of \$11,369.

A large share of the FNF's income came from a \$10,000 grant from the Jerry Greenfield and Elizabeth Skarie Foundation in October 2013, and from a \$2,000 matching grant from the Ben and Jerry's Foundation. We also received a \$1,000 grant from the Community Capital Foundation of Kansas City. The remainder was made up of individual donations, many from monthly contributors.

A complete account of the FNF's financial data may be found on the Commons, at <http://commons.thefnf.org/index.php/Finances>



# FNF FINANCIAL REPORT 2013

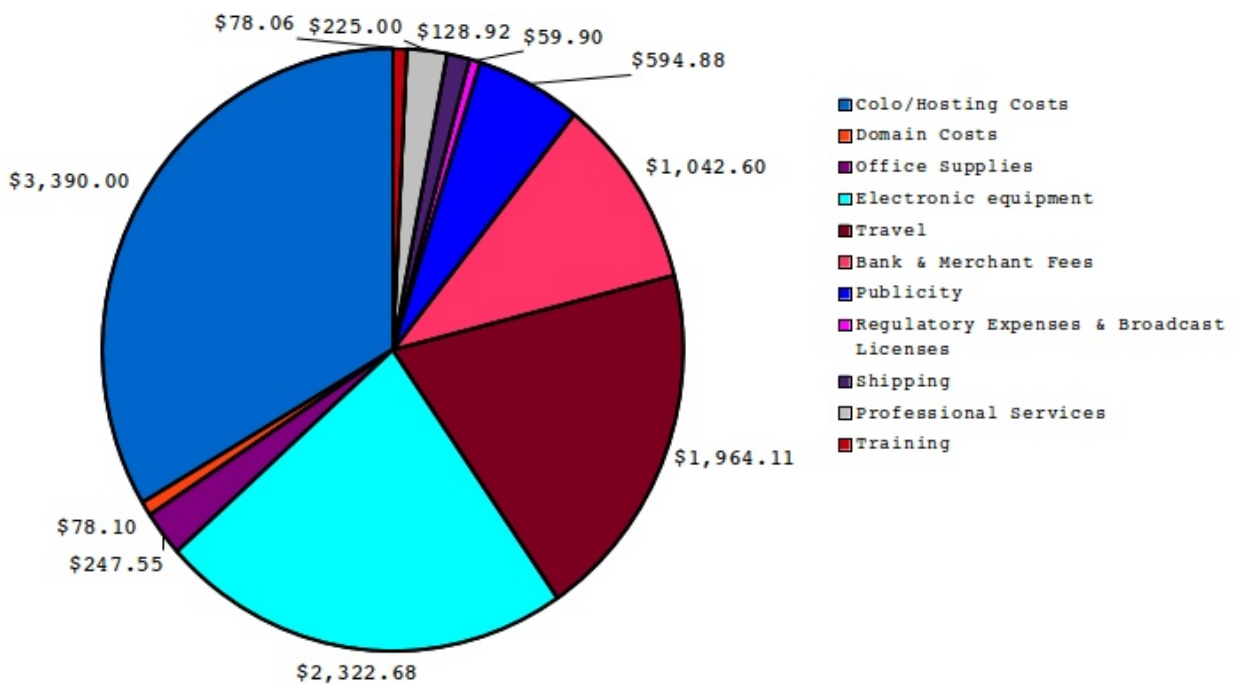
## EXPENSES

Of the \$16,912 we spent in 2013, the largest portion went into colocation and hosting costs. We maintain server and storage infrastructure at a colocation facility in Kansas City, MO, costing us a total of \$275/mo. Our colocation cost in KC decreased this year when Connecting for Good took over the costs of maintaining radio facilities at Oak Tower. Until February 2013, we were also maintained a backup facility in Dallas, TX.

The second largest portion of our expenses went into electronic equipment - this equipment was used to improve FreedomCenter, build out the network laboratory, and help key partners get started building networks. The next largest portion was travel-related: either sending delegates to conferences, or getting core team members to key FNF meetings.

FNF Expenses by Type

2013



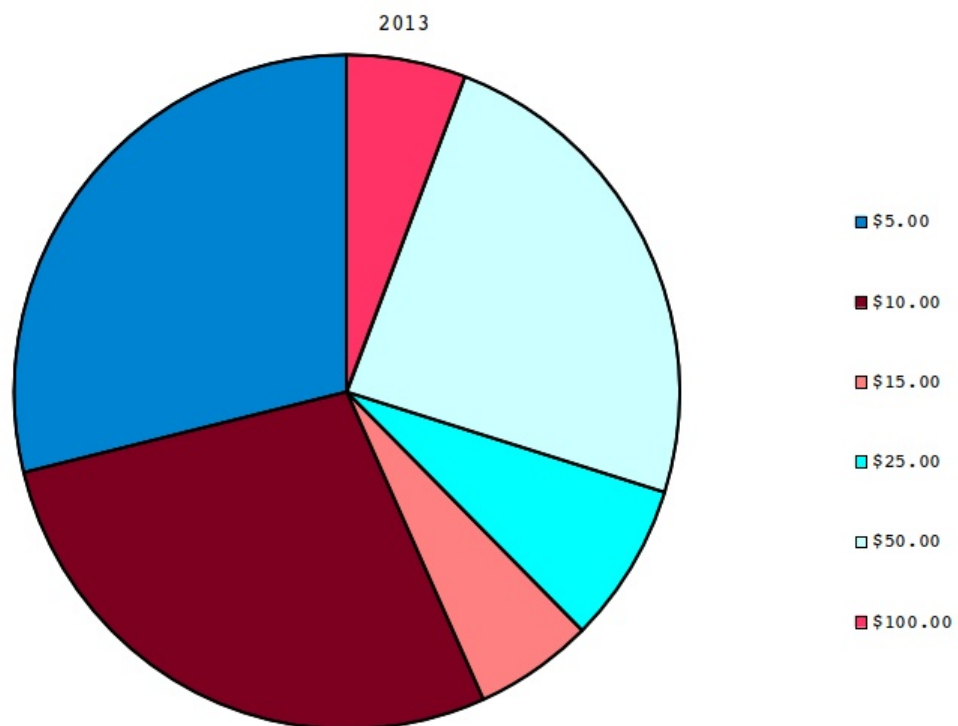
# FNF FINANCIAL REPORT 2013

## DONATIONS

This data on donations includes donors who gave to the FNF through Paypal and WePay. It does not include either the \$10,000, \$2,000, or \$1,000 grants we received, or donations we have received in cash, all of which are noted elsewhere in this review and explained in the full financial report. Our statistics on donations consider monthly contributions as a collection of one-time contributions.

In 2013, the FNF received 105 donations. The median donation was \$10, and the mean donation was \$25.

Percentage of Total Number of Individual Donations by Amount



# THANKS TO OUR DONORS 2013

Adam Anderson, \$20

Ronnie Bauch, \$50

Christopher Conde, \$5

Francis Deslauriers,  
\$60

John Drefahl, \$50

Marcus Eagan, \$10

Johnathan Ebbers, \$10

Jaqueline Fellner, \$30

Elise Gallant, \$165

Doug Greer, \$110

Harlene Hipsh, \$1000

Miriam Hipsh, \$20

Alex Horn, \$25

Eric Johnson, \$100

David Lambert, \$150

Alec Maliwanag, \$100

Anne McGregor, \$150

Alexander Melia, \$30

Gabriel Paley, \$50

Stephen Price, \$140

Marc Shade, \$5

Seymour Weiss, \$20

Isaac Wilder, \$30

Nancy Wolff, \$250



*Isaac and Tyrone at Rosedale Ridge*

# HOW TO CONTRIBUTE

Without your support, our work would be impossible. Innovation under austerity is something that takes a village. It means that we've all got to pitch in, in whatever way we can. For some of us, that means devoting our time, our energy, and our skills. For others it means donating money, hardware, or resources. For all of us it means sacrifice, dedication, and a will to build a more equitable world.

We hope that this document has shown you that the FNF is an organization that is capable of making a few resources go a long way -- now we'd like to highlight some of the ways that you can support the mission of the FNF in the new year:

**HACK WITH US** -- Having spent the last year building a world-class playground for network hackers, we could not be more excited about the prospect of having the wider community of researchers make use of our resources. If you are interested in working in, on, or around FreedomCenter, please don't hesitate to be in touch.

**KEEP THE LIGHTS ON** -- The blinking lights, that is. Keeping all of our systems online and available for the world to use takes money. Becoming a member of the FNF not only helps us pay our bills, but it helps us grow and plan in a way that is sustainable. You can sign up on our website or by emailing [contact@thefnf.org](mailto:contact@thefnf.org)

**CHANGE THE GAME** -- Making a donation to the FNF is making an investment in our collective future. We use our funds to get tools built -- tools that are useful in fight for freedom in the online sphere. We welcome gifts of any size, and are happy to work with donors to see that funds are directed towards and activity of their choosing. In addition to accepting Federal Reserve Notes through our website, the FNF is thrilled to accept Bitcoins. **Our Bitcoin address is 18S8ugWEuWLBMP9DBpBdDk9SN6CiRxZB8S.**

**GIVE IN KIND** -- If you've got a resource, chances are we could put it to good use. Roof space, office space, old computers, shop tools, AV gear, an old car, books -- whatever you've got. Our main offices are in Kansas City and Austin, but we've also got contingents operating in Boston, New York, and the Bay Area. If you think you've got something that could be of use, let's talk.

**BE A PART OF IT** -- The world can be daunting, and our needs go far beyond the material. More than anything, the moral and spiritual support of community is what sustains us. Our [Discuss] list is the center of our community, and we hope you'll consider being a part of the conversation.



**YOU  
CAN  
SHARE  
THIS  
DOCUMENT**



**BY - SA  
3.0**