

## Supplemental Information

---

### *Supplemental Information Files:*

- 1. The Process of Sustainable Broadband Adoption**
- 2. Amplified Technology Strategy Section**
- 3. Initial Scope of Training/Education Programs**

# 1 The Process of Sustainable Broadband Adoption

The viNGN Sustainable Broadband Adoption (SBA) Program is itself sustained by any excess funds derived from the revenues of the viNGN Comprehensive Community Infrastructure Program. But aside from assuring funding longevity, to be effective, sustainable broadband adoption must address the complete hierarchy of needs of all USVI citizens. Normally, this means starting with the young and very young who are eager and ready to take on innovation much more readily than those who are older and more set in their ways. So, to be successful in reaching everyone, it is important to use the right sequence of action, just as in any other form of successful marketing campaign.

The following graph illustrates some touch points of the viNGN SBA Program across the spectrum of the adoption curve beginning with the early adopters, and spanning through those that need more time to adopt something new.

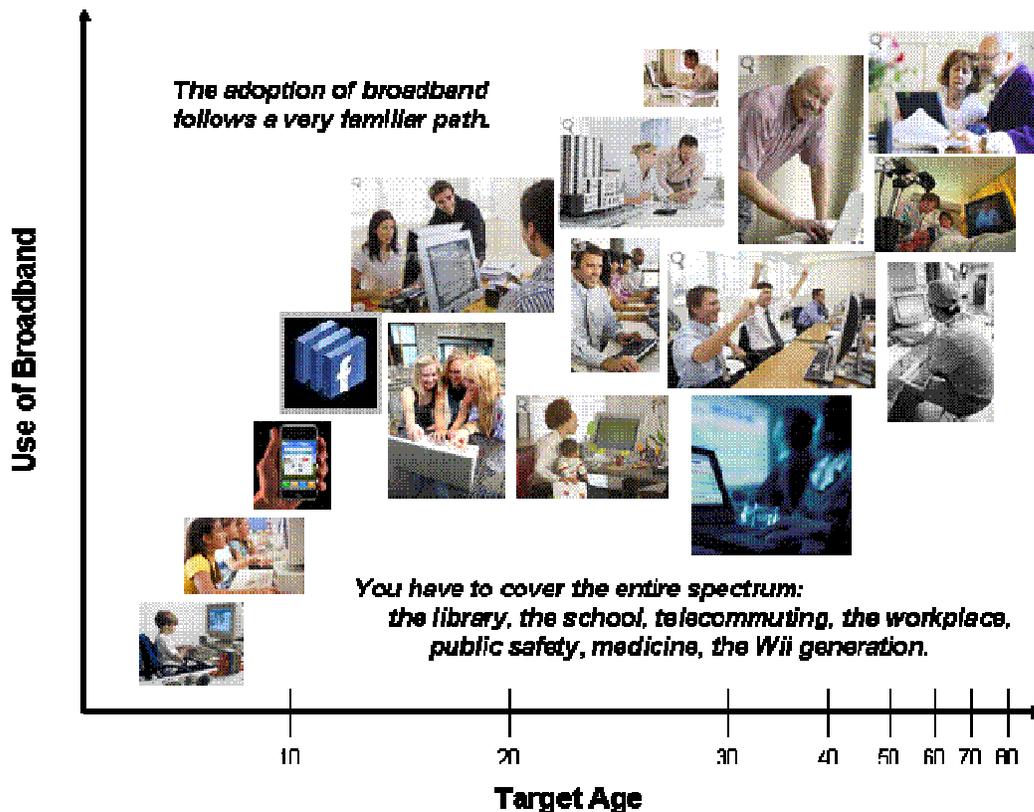


Figure 1. The Broadband Usage Adoption Curve

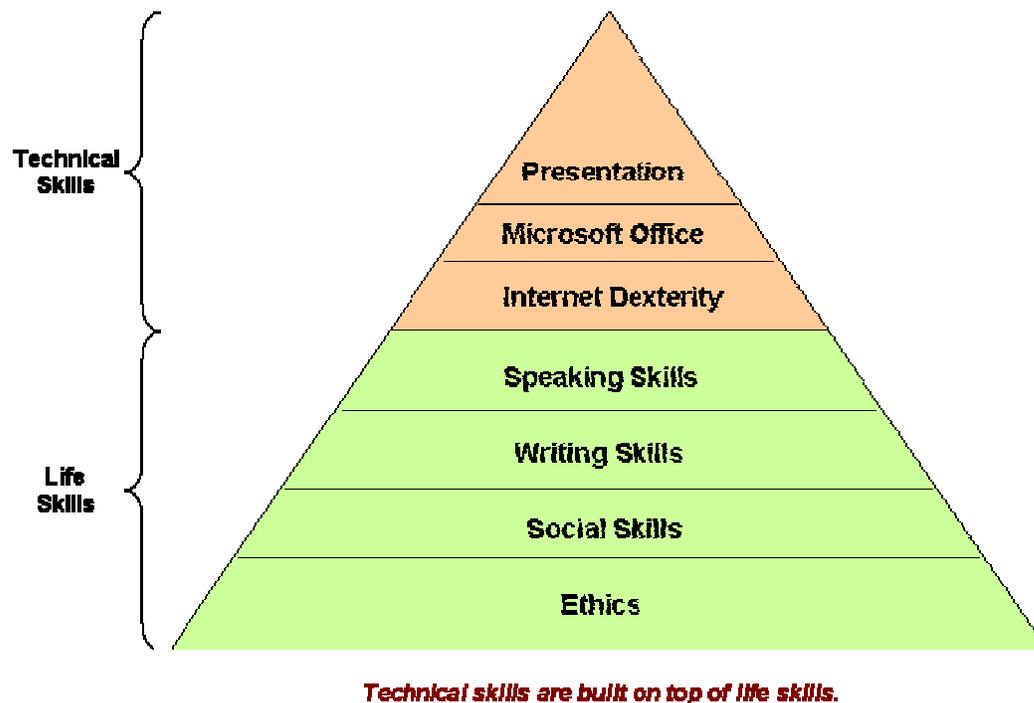
The best form of adoption tactic has been found to be in the creation of many small swirls of people talking to other people about the merits of something new that has just been introduced. Such is the basis of any viral marketing movement.

Our multiple prong attack is best explained starting from left to right with the introduction of broadband related matters to the very young. In the USVI this may mean a trip to the library for the many children that are from homes without PCs or broadband connection of

any kind. Games designed to engage children in lessons of dexterity and operation of the basic devices make use of the computer itself as natural as breathing air.

We must support teenage youth as the social drives to interact with one another through smart phones, Facebook, and engagement in groups in quest for excitement, for meaning, and group acceptance is so powerful at this stage of life. Abandonment will tend toward the dark side of gang mischief in the public housing projects. But properly channeled at this age, the youth will be the teachers of the older generation.

As the need for making a living first emerges, there is a need for a different type of training. The phenomenon here is that technical skills are not really enough to get by on. The following diagram seems to capture the essence of the need for life skills as well as technical skills.



**Figure 2. The Essential Skills Pyramid.**

The experience gained to date from the very good head start on the use of technology shows that technical skills must be built on top of a good base of life skills; otherwise the technical skills are not nearly as effective in the marketplace. The skills needed to be truly successful must include those learned by observing the habits of other successful people.

Some life skills can be taught in school, but with the mechanical aspect of teaching, we find that many teachers are not comfortable teaching all aspects of life skills, preferring to focus just on the subjects they are charged with delivering. Subjects such as ethics and social skills are developed by observing respected leaders in action and delivering the message to the young people personally and with conviction. Such is the basis for the leadership series planned for delivery at the new library meeting facilities by the Governor and other inspiring leaders in the community.

For writing skills, there is no substitute for critical writing administered with the skill of a freshman English taskmaster. Such is the subject of the new UVI pre-university program for *Writing for Professional Success*.

For speaking skills, there is no substitute for making public speeches to your peers under the watchful eyes of a skilled coach. This is the subject of the new course taught at the teleconferencing center at the main libraries entitled *Public Speaking for Leadership Success*. During this course, skills are developed as an interviewee over videoconferencing, diction and etiquette when speaking on the telephone providing help to others, and presence when delivering instruction and public messages on local television and videoconference meetings to national audiences. The emphasis is on combing out idiosyncrasies of local dialect and cultural distractions when addressing national and global audiences.

The orientation is on having young people work in small groups honing that handful of skills that are essential in making oneself successful as a professional. It is on this base the training of technical skills begins.

There follows a need for certification, job-focused training, and collaborative skills necessary in the job environment. Performing jobs for companies off island is just now becoming very important as jobs that have earlier been outsourced to India are now moving back to the United States because of language and culture problems.

As we progress down the adoption cycle toward the older population, it is clear quality of life is immeasurably improved by acquiring the basic skills necessary to stay in touch with one's family in the new electronic age. Regardless of one's age, once someone has been helped through the process of staying in touch using the Internet, the connectivity becomes a very treasured and usual part of daily life.

So to explore our program for sustainable broadband adoption, let us return to the adoption chart and see how we will set a process in motion to address the needs of the spectrum of different age groups in the USVI.



useful at both a young age and also later as the need for professional certification emerges. In addition to basic computer skills, it provides intense training in the nuances of all aspects of Microsoft Office productivity tools. Vertical skills address specific areas that the individual may be curious about. These include artistic presentation skills using advanced tools from Apple. Other offerings are programming and systems administration skills meant for computer networks, both from a server as well as router standpoint.

The NEF provides "train the teachers" training and organization to the multi-island deployment, all under the watchful eye of the overall program coordinator.

These courses are supplemented with expert tutoring from viNGN technical support consultants that are available to support advanced questions beyond those typically fielded by the library training team. Having access to the specialists that actually run the sophistication of the live network is invaluable in making the learning relevant to the real-world rather than just academic.

### **Emphasis on Team Interaction**

As has been observed by national bodies of educators, the fastest and most effective education occurs not so much in the traditional classroom, but when small groups of people gather in a team exploring a topic that has an immediate vocational payback that they put together themselves. It is the social interaction combined with the immediate access to information and the immediacy of the payback that drives the enthusiasm.

By creating the out-of-classroom environment in the libraries and other public community centers, the actual probability of success leaps forward when compared to normal classroom training. It also creates an incubator of sorts for the potential commercialization of ideas in the minds of young people.

It is this passionate pursuit of possibility in the minds of 24-year-olds that will produce the best catalyst for drawing other people into the adoption of broadband.

### **Phenomenon of the Smartphone**

In terms of status and esteem, even in an environment of unemployed or underemployed people, the status of a young person is tied many times to the proud ownership of a smartphone. It is amazing how many of these devices are brandished on the street by young people of all ages. The mobile number seems to be a part of the emotional identity of the proud owner of the device.

AT&T is the largest, most influential provider of cellular service in the USVI. Therefore, the natural choice of device and integration into the SBA process will be the Apple iPhone with all its broadband features. The expansion of broadband capacity to support this device by AT&T in the USVI is a priority for the SBA program and any mobility requirements for the adoption program. This aspect of the program will not be hard to achieve given the marketing power and captivating presence of the Apple Corporation.

### **The Phenomena of Facebook**

Taking the lead of the City of San Francisco, viNGN will not only provide information from its own website, but it will also introduce the idea of having a Facebook account. viNGN is also working with the Bureau of Information Technology to establish a pattern of Facebook accounts for many other Territory government departments. The hardest problem

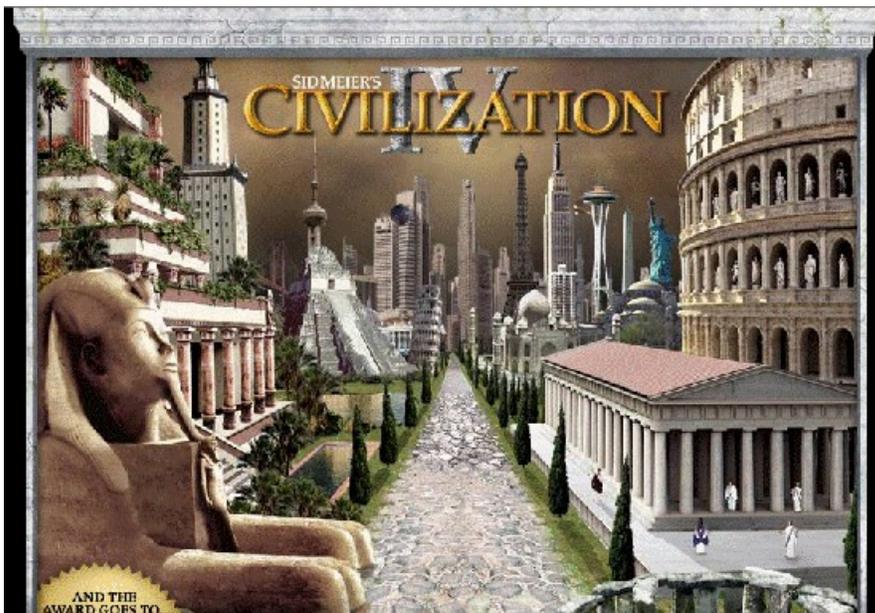
of the sustainability program is staying in touch with its constituents on a more personal level. For that matter, it is one of the hardest problems that all local governments face. So San Francisco is not alone in using this social technology oriented tool, which if used well, can rapidly keep the participants interconnected. Recent history has shown that this technique is even useful during the campaign to become a senator or president of the United States. The viNGN SBA program will adopt Facebook from the outset as the tool for staying in touch with the various participant groups that will spring up during the planned programs.

### **Choice of Simulation Tools**

Life lessons need to be amplified with simulation tools that can be used without fear of consequences of making mistakes. To learn something well, you have to be able to make plenty of mistakes, get instant feedback, and make corrections. It is best to do this in privacy and safety on one's own before being exposed to the ridicule of one's peers. The computer can be a marvelous device for its patience and support.

One rarely learns a skill so well as when teaching it to others. When faced with the embarrassment of not being able to answer questions of a pupil, one works three times as hard to understand the elements of a subject as when one can slough off the details when scanning material. That is why the tutoring program is so important to the learning program.

The viNGN SBA program also includes another aspect of the technology-based self-directed environment we are creating that draws simultaneously from an understanding of life skills and technical skills. From the highly addictive nature of the computer simulation games tournament we include a fine tool for learning history lessons and what makes a government and a civilization strong over time, the game of Civilization.



**Figure 4. *"Those who are not students of history are doomed to repeat it."***

[\(click here\)](#)

We will run this first Civ tournament just for the Virgin Islands, but if it is successful, we can expand to the entire Caribbean. Other themes can be used for variation, like at Columbia University where SimCity is the key simulator in a similar program at the Civil Engineering school.

### **The Transition to the Workforce**

As people arrive at the age to enter the workforce, the program supports the skills to operate professionally. Some will be directly related to their technical skills, but most will not. And the current problem in the Virgin Islands is the scarcity of meaningful jobs at all. So the immediate concern for the program at the outset is to not only familiarize all elements of the public with what broadband is and what it can do for them, it is getting broadband to their homes as fast as possible so that they can conveniently use it.

A major push by the viNGN CCI program at the outset will occur with the wireless data providers to help them boost their capacity for wireless connection. The longer term plan is to work with the landline service providers to expand home and office access broadband to similar levels that the viNGN network will be offering to anchor tenants. As the broadband capacity problem is addressed, the major economic push will be to expand access to telework positions for USVI citizens with not only companies here on the islands, but also to major companies on the mainland United States and the larger global community. But this needs a catalyst, because it will not happen all by itself.

As the wireless and fiber networks supported by the CCI expand to the residents, the telework program will engage. viNGN will use the highly successful Jet Blue model for expanding the work-from-home program offered by our partner BetterWorld Telecom. BetterWorld supports large companies in the United States that operate through distributed workgroups that use employees that work at home.

The short version of the BetterWorld process will include the following steps:

1. Select a group of towns/areas in the US Virgin Islands for the project.
2. Coordinate with the library and/or university in selected areas to set up and conduct training and interviews using on-site and videoconferencing techniques.
3. Identify the groups of candidates for training (CRM, technology, interviewing) and conduct pre-screening for broadband virtual call center positions.
4. Identify and facilitate interviews with target companies in need of outsourced, remote call center jobs.
5. Assist/facilitate each new hire with appropriate, home-based technology such as voice, data, broadband, and computers.
6. Set up ongoing monitoring and quality control.
7. Project goals and targets: Identify, train, and certify 840 individuals with the goal of finding jobs for 420 of them by the end of the first two-year period of the project at a cost of \$1,420 per candidate trained, 50% receiving jobs at a total cost of \$1.19M.

BetterWorld partners with industry-leading CRM and technology providers to offer organizations any feature and functionality found in a premise-based call center solution.

The broadband-based communications system that BetterWorld uses has the following attributes:

- The distributed framework allows for the work anywhere/anytime dynamic, making scheduling and workforce management much simpler.
- The increased efficiencies result from removal of commuting and workplace dynamics.
- The solutions enable a more satisfied workforce, which in turn reflects positively on the end-customer experience.
- The identification of potential call center employees helps employers immediately find qualified job candidates.

The differentiating approach to be used in the USVI over other such virtual call centers is the inclusion of the library videoconferencing facilities, the PCC logistics, and the technical support ecosystem that is being added. IBM studies show that distributed multi-cultural projects start to deteriorate after two weeks if there is no place for real in-person team gathering to take place. The library conference centers are going to be used for this meeting point. Also, the richness of communications that can be used to talk, show, observe, and provide feedback make distributed workplaces ten times easier to operate than half measures ever do. It is the attention to the “high touch” as much as the “high tech” supports that make these programs work well from all perspectives.

### **Professional Certification Refresh**

The sustainability program related to the healthcare and public safety sectors focuses on the need for regular recertification of key staff members. The NEF as well as National Association of Community Healthcare Centers provide excellent programs in these areas. They change continuously to maintain up to the moment relevance to their specific sectors. The broadband infrastructure and continuing operation of the local sustainability program will keep these vertical programs vibrant.

### **And for the Very Advanced**

The unique nature of the viNGN comprehensive community infrastructure and its compact size make it a living laboratory for all who engage in its construction and operation. The University of the Virgin Islands is planning a new degree program that focuses on the lessons learned from building viNGN, one of the world’s most well rounded community networks. Calls have come in from other parts of the United States wanting to understand the details of how to deploy the combined broadband/smart grid because of the obviousness of the efficiencies resulting from the holistic thinking. Cornell University is monitoring the lessons learned so that it can duplicate the approach in its own way in upstate New York. The videoconference workshops for how Carrier Ethernet solutions such as the viNGN network can be deployed in other communities are now being planned jointly by UVI and Cornell for wide inclusion in other universities.

### **Attention to the Older Generation**

As the marketing adoption curve has moved from early adopters, through the group conscious early majority, and on into the safety conscious late majority, many of the older generation are now becoming more accustomed with the thought of participating in the new

Internet world. The emphasis of the late majority phase (the older generation) is on matters of safety and also on staying in touch with family. The emphasis is also on simplicity – as it is the complexity of the broadband world that is the greatest impediment to broadband adoption by the older generation. The outreach program by the viNGN SBA program will be specially crafted to focus on a few basic skills:

- Sending and receiving email
- Receiving pictures of family
- Making Skype calls to family
- Staying in touch using Facebook

Although perceived as simple things, the hardest part is getting the hands to touch the keyboard. Once used regularly, the mystery disappears and the relevance immediately manifests itself.

### **Summary**

Our approach to sustainable broadband adoption is founded on practical matters and sound marketing technique:

- We will engage the young by leveraging their natural inclination toward exploration and friends.
- We will emphasize life skills to support the new technical skills.
- We will engage youth through their need for status and esteem and their social needs to do things together.
- We will rapidly expand real jobs through the telework program as a catalyst.
- We will support public safety and healthcare through our certification programs.
- We will teach the older generation how to stay in touch with family.
- We will leverage the viNGN CCI Program and the viNGN PCC Program as a single coordinated master program.
- We will create a center of excellence for the higher technical skills needed for global interconnection through our living laboratory and our national learning video workshops.

These are the opening goals of one of America's most comprehensive community infrastructures.

## 2 Amplified Technical Strategy Section

---

This section provides more detail on the Technical Strategy Section than the character counts would have allowed.

The technical aspects of the program use two important systems to deliver the sustainability program:

- The Cyberlearning Educational System
- BetterWorld Virtual Call Center

These Software as a Service applications all depend on browser access to the Internet and a quality rich Carrier Ethernet environment for high fidelity voice and video services. They heavily use the conference room and computer facilities that are part of the viNGN PCC Program. The depot of computers maintained in the PCC Program can be “checked-out” and used by telework participants with their own computers.

The Cyberlearning program is from the National Education Foundation.

It system features are:

- More than 3,000 courses in IT, business, K-12, test preparation, small business management, personal finance and many other areas (please see supplemental information attachment for full list)
- Based on continuously updated Open Source project Moodle
- Access anytime, anywhere (Internet access required)
- Browser based (Internet Explorer with Flash required)
- No IT investment, server or infrastructure required beyond the availability of workstations; highly available distributed architecture
- Rich courseware
- Flexibility in packaging to meet each organization’s needs
- Rich set of learning management features for students, teachers, and administrators
- Enhanced management reports
- Added flexibility to create virtual organizations called Groups, Permissions and Packaging of courses
- Improved scalability

The approach is effective and appropriate in achieving sustainable adoption because we provide users with the experience of online learning and create conditions in which novice users (by far the majority) can be successful. Once USVI residents see the value of courses and understand how training and industry certifications provide them with an employment

boost, they will be want to participate fully in the program. Carefully integrating this system within library- and community center-based local workforce training will increase synergies between blended learning, just-in-time learning, and self-paced online learning. This results in a wide range of flexible learning and training options for residents. Key program features include an initial needs analysis for each individual and the creation of a steering committee composed of key stakeholders, including employers, UVI, and viNGN representatives.

The approach is highly replicable and feasible, with every aspect of the system implementable anywhere in the US. NEF has tested the basic plan in its work with K-12 schools, creating “virtual academies” in disadvantaged schools across several states. These academies have increased student scores upwards of 20 percent. The key success factors are quality courses (NEF courses are among the highest rated), highly trained teachers and mentors, a robust and easy to use Learning Management System (LMS), well developed training modules and protocols, and stakeholder input.

### BetterWorld Virtual Call Center

#### System Features of BetterWorld network:

- Employs a cloud-based communications infrastructure with unified communications, virtual PBX, all combined with remote CRM applications
- Software as a Service (SaaS)
- Distributed framework allows for the work anywhere/anytime dynamic, making scheduling and workforce management much simpler
- National VoIP-based call center using the Broadsoft platform
- Use of Carrier Ethernet quality of service improvements
- Quality is similar to premise-based call center systems
- Cost-effective local, long distance, inbound and outbound calling services for corporations using the remote services
- Setup, provisioning, quality control, moves/adds/changes/deletes, all handled from single service provider
- Ongoing monitoring and quality control

The approach is effective and appropriate for sustainable adoption purposes because we provide users with training for technical support operations, diction, customer service etiquette, videoconference interviewing skills, and create conditions in which novice users (by far the majority) can be successful.

Carefully integrating this system within library- and community center-based local workforce training will increase synergies between life skills and technical skills, just-in-time training and self-paced online learning. This results in a wide range of flexible

learning and training options for the potential workforce. Key program features will include an initial needs analysis for each individual and the creation of an employment steering committee composed of key employers, the VI Bureau of Labor, and viNGN representatives.

The approach is highly replicable and feasible, with every aspect of the system implementable anywhere in the US. BetterWorld operates in 22 states in the U.S. right now.

### 3 Initial Scope of Training/Education Programs

---

See [www.cyberlearning.org/courses](http://www.cyberlearning.org/courses) and [www.nefuniversity.org](http://www.nefuniversity.org) and click on course catalog for the course descriptions.

NEF's 2,000 IT and business courses prepare students for any of 60 industry (such as Microsoft, Cisco, Oracle, CompTia, Project Management Institute) certifications. Students can get certificates and credits three ways:

- 1) **Certificates** from CyberLearning upon successful completion of any course.
- 2) **CEU (Continuing Education Unit) credits** from the fully accredited Otterbein College in Ohio (established in 1847).
- 3) **College credits** from fully accredited Bacone College in Oklahoma (established 1880) upon getting industry certification, or passing a proctored final exam, or from their community colleges, colleges and universities, since most of them provide college credits for the IT certification courses. Our project management courses are approved by the Project Management Institute (PMI).

The SBA program targets populations from the following 34 programs, of which the latter 18 are ARRA jobs prep programs. Note: All 60+ IT/Business certification courses are marked **CERTIFICATION**.

Program 1: **IC3 or Digital Literacy- CERTIFICATION** prepares 8<sup>th</sup> graders for the NCLB mandated test, and jobseekers for entry level jobs requiring basic technical skills:  
Training hours/person: 30 hours

Program 2: **GED**: Training hours/person: This course is being developed.

Program 3: **K-5 Elementary School Math** (English or Spanish): Training hours/person: 45 hours

Program 4: **6-8 Middle School Math** (English or Spanish): Training hours/person: 35 hours

Program 5: **9-12 High School Math**: Training hours/person: Learning hours vary

Program 6: **High School Science**: Training hours/person: Learning hours vary

Program 7: **High School Humanities**: Training hours/person: Learning hours vary

Program 8: **SAT**: Training hours/person: 40 hours

Program 9: **ACT**: Training hours/person: 40 hours

Program 10: **GRE**: Training hours/person: 15 hours

Program 11: **GMAT** Training hours/person: 23 hours

Program 12: **Office Computing** includes all MS Word, Access, Excel, PowerPoint and Outlook courses

Course Package	Training Hours/Person
Access 2000 MOS <b>CERTIFICATION</b>	22
Access 2002 <b>CERTIFICATION</b>	22
Access 2003 <b>CERTIFICATION</b>	22
Access 2007 <b>CERTIFICATION</b>	9
Access 2007 Advanced <b>CERTIFICATION</b>	9
Computer Basics	4
Computing Concepts	23
Crystal Reports 8	28
Crystal Reports XI	21
Excel 2000 MOS <b>CERTIFICATION</b>	21
Excel 2000 MOS Expert <b>CERTIFICATION</b>	22
Excel 2002 <b>CERTIFICATION</b>	22
Excel 2003 <b>CERTIFICATION</b>	26
Excel 2007 <b>CERTIFICATION</b>	11
Excel 2007 Advanced <b>CERTIFICATION</b>	12
GroupWise 5.5	16
GroupWise 6.5	26
Internet Explorer 6	6
Internet Explorer 7	2
Introduction to PCs	35
Internet Explorer 7	2
Introduction to PCs	35
Office 2000	27
Office 2003 - What's New	2
Office 2007	17
Office XP Upgrade	10
Outlook 2002 <b>CERTIFICATION</b>	18
Outlook 2003 <b>CERTIFICATION</b>	25

Outlook 2007 <b>CERTIFICATION</b>	15
Paint Shop Pro 5	9
PowerPoint 2000 MOS <b>CERTIFICATION</b>	16
PowerPoint 2002 <b>CERTIFICATION</b>	17
PowerPoint 2003 <b>CERTIFICATION</b>	25
PowerPoint 2007 <b>CERTIFICATION</b>	19
Project 2000 MOS <b>CERTIFICATION</b>	21
Project 2003 <b>CERTIFICATION</b>	30
Project 2007 <b>CERTIFICATION</b>	16
SAP R/3 Release 4.6	11
SharePoint 2003	16
SharePoint 2007	14
Visio 2002	36
Visio 2007	16
Windows 2000 Basics - Client	3
Windows Vista	2
Windows XP Upgrade	6
Word 2000 MOS	19
Word 2000 MOS Expert <b>CERTIFICATION</b>	20
Word 2002 <b>CERTIFICATION</b>	19
Word 2003 <b>CERTIFICATION</b>	32
Word 2007 <b>CERTIFICATION</b>	14
Basics of Business Math	16

**Program 13: Basic Computer Skills**

Course Package	Training Hours/Person
CompTIA A+ Depot Technician 220-604 <b>CERTIFICATION</b>	15
CompTIA A+ Essentials 220-601 <b>CERTIFICATION</b>	24
CompTIA A+ IT Technician 220-602 <b>CERTIFICATION</b>	21

CompTIA A+ Remote Support Technician 220-603 <b>CERTIFICATION</b>	20
CompTIA Network+ 2005 (N10-003) <b>CERTIFICATION</b>	38
CompTIA Security+ SY0-101 <b>CERTIFICATION</b>	24
CompTIA Security+ 2008 (SY0-201) <b>CERTIFICATION</b>	33
CompTIA Server+ 2005 (SK0-002) <b>CERTIFICATION</b>	46

Program 14: **Business Skills**

Course Package	Training Hours/Person
Basics of Business Math	16
Building Relationships	5
Business Ethics	5
Communicating with Power	9
Customer Service	23
Dealing with Difficult People	8
Doing Business in China	3
Doing Business in India	4
E-Mailing Your Way to the Top	5
Effective Business Communication	11
Effective Presentations	10
Fundamentals of Business Management	10
Grammar	10
Instructional Design	17
Management Skills Introduction	6
Managing Change	5
Motivation	11
Motivation Methods and Strategies	1
Negotiating	19
Sarbanes-Oxley Act	6
Sexual Harassment in the Workplace	3

Stress Management	3
Teams That Work	4
Time Management for Maximum Productivity	3
Time Management Fundamentals	11

**Program 15: Home and Small Business**

Course Package	Training Hours/Person
401(k) Plans	3
Budgeting and Saving	21
Estate Planning	25
Home Business	20
Interview Skills	27
Investing Fundamentals	22
QuickBooks	30
QuickBooks 2004	33
Retirement Planning	10
Works	21

**Program 16: Business Skills Videos**

Course Package	Training Hours/Person
Customer Service (Videos)	3
Finance (Videos)	1
Global Business (Videos)	1
Sales and Marketing (Videos)	4
Workplace Environment (Videos)	3
Coaching (Videos)	1
Leadership (Videos)	6
Leading Teams (Videos)	2
Management (Videos)	5
Managing Within The Law (Videos)	5
Six Sigma (Videos)	1

Career Development (Videos)	2
Communication (Videos)	3
Self-Management (Videos)	4
Work and Life Balance (Videos)	2

Program 17: **IT- Web Design Jobs Prep**

Course Package	Training Hours/Person
AJAX	20
CGI/Perl	15
CIW Foundations 1D0-510 <b>CERTIFICATION</b>	11
CIW Security 1D0-470 <b>CERTIFICATION</b>	39
ColdFusion MX	28
Dreamweaver 8	4
Dreamweaver MX	42
Dreamweaver MX 2004	23
Dynamic HTML	18
Flash 8	7
Flash MX	18
Flash MX 2004	24
Flash MX 2004 ActionScript 2.0	11
Flash MX ActionScript	36
FrontPage 2000	11
GUI Design	10
Internet Marketing	6
Java 1.2	20
Java 2 5.0 Programmer Certification 310-055 <b>CERTIFICATION</b>	12
Java 2 5.0 Programming	31
Java 2 Enterprise Design	44
Java 2 Programmer Certification 310-035 <b>CERTIFICATION</b>	29
Java Web Services	15
JavaScript	14

Photoshop	19
Photoshop 7	44
Photoshop CS	33
PHP and MySQL	43
Running an Online Business	55
Visual C#	19
Visual InterDev 6	30
Web Design & Graphics	16
Web Publishing and Design with HTML 4.01 and XHTML	15
WebSphere 7.0 with Rational Application Developer	20
WebSphere Studio Application Developer 5.0 & J2EE	14
XML	15

**Program 18: IT- Microsoft Technical Jobs Prep**

Course Package	Training Hours/Person
Visual Basic 6	33
Windows 2000 Basics - Server	3
Windows Vista Upgrade	3
Exchange 2000 Administration MCSE 70-224 <b>CERTIFICATION</b>	24
IIS 6	37
Microsoft .NET 2.0 App Development MCTS 70-536 <b>CERTIFICATION</b>	19
Microsoft .NET 2.0 Distributed Apps MCTS 70-529 <b>CERTIFICATION</b>	12
Microsoft .NET 2.0 Web Development MCTS 70-528 <b>CERTIFICATION</b>	16
Microsoft .NET 2.0 Windows Development MCTS 70-526 <b>CERTIFICATION</b>	16
Microsoft .NET Applications MCSD/MCAD/MCDBA 70-316 <b>CERTIFICATION</b>	16
Microsoft .NET Architectures MCP/MCSD 70-300 <b>CERTIFICATION</b>	16
Microsoft Exchange Server 2003 MCSA/MCSE 70-284 <b>CERTIFICATION</b>	16

Microsoft Exchange Server 2007 MCTS 70-236 <b>CERTIFICATION</b>	15
Microsoft Office Project 2007 MCTS 70-632 <b>CERTIFICATION</b>	9
Microsoft SharePoint Server 2007 MCTS 70-542 <b>CERTIFICATION</b>	9
Microsoft SharePoint Server 2007 MCTS 70-630 <b>CERTIFICATION</b>	20
Microsoft SQL Server 2005 Admin MCITP 70-444 <b>CERTIFICATION</b>	13
Microsoft SQL Server 2005 Data Access MCITP 70-442 <b>CERTIFICATION</b>	14
Microsoft SQL Server 2005 Design MCITP 70-443 <b>CERTIFICATION</b>	16
Microsoft SQL Server 2005 Solutions MCITP 70-441 <b>CERTIFICATION</b>	12
Microsoft SQL Server 2005 Upgrade MCITP 70-447 <b>CERTIFICATION</b>	5
MS Exchange Server 5.5	40
Project Server 2003	17
Server 2003 Security Admin MCSA/MCSE 70-299 <b>CERTIFICATION</b>	11
SQL Server 2000 Admin MCDBA MCSA MCSE 70-228 <b>CERTIFICATION</b>	13
SQL Server 2000 Database Design MCSE 70-229 <b>CERTIFICATION</b>	21
SQL Server 2005 MCTS 70-431 <b>CERTIFICATION</b>	26
SQL Server 6.5	46
SQL Server 7 Admin	60
TCP/IP	40
Visual Basic .NET for Web MCSD/MCAD 70-305 <b>CERTIFICATION</b>	19
Visual Basic .NET for XML Web MCSD/MCAD 70-310 <b>CERTIFICATION</b>	15
Visual Basic .NET Windows Apps MCSD/MCAD 70-306 <b>CERTIFICATION</b>	14
Visual C# Web Applications MCAD 70-315 <b>CERTIFICATION</b>	48
Visual C# XML MCAD 70-320 <b>CERTIFICATION</b>	53
Visual Studio .NET Advanced Topics	28

Visual Studio .NET and ASP.NET	8
Visual Studio .NET Overview	6
Visual Studio .NET Programming with Visual C#	10
Windows 2000 Active Directory MCSE 70-217 <b>CERTIFICATION</b>	30
Windows 2000 Directory Design MCSE 70-219 <b>CERTIFICATION</b>	35
Windows 2000 Network Administration MCSE 70-216 <b>CERTIFICATION</b>	22
Windows 2000 Network Design MCSE 70-221 <b>CERTIFICATION</b>	26
Windows 2000 Network Management MCSA 70-218 <b>CERTIFICATION</b>	44
Windows 2000 Professional MCSE 70-210 <b>CERTIFICATION</b>	42
Windows 2000 Security Design 70-220 <b>CERTIFICATION</b>	40
Windows 2000 Server 70-215 <b>CERTIFICATION</b>	46
Windows Server 2003	18
Windows Server 2003 Active Directory MCSE 70-294 <b>CERTIFICATION</b>	37
Windows Server 2003 Administration MCSE 70-290 <b>CERTIFICATION</b>	54
Windows Server 2003 Infrastructure MCSE 70-297 <b>CERTIFICATION</b>	22
Windows Server 2003 Network Management MCSE 70-291 <b>CERTIFICATION</b>	54
Windows Server 2003 Network Planning MCSE 70-293 <b>CERTIFICATION</b>	51
Windows Server 2003 Security MCSE 70-298 <b>CERTIFICATION</b>	33
Windows Server 2008 Networking MCTS 70-642 <b>CERTIFICATION</b>	8
Windows SharePoint Services 3.0 MCTS 70-541 <b>CERTIFICATION</b>	6
Windows SharePoint Services 3.0 MCTS 70-631 <b>CERTIFICATION</b>	8
Windows Vista & Office 2007 Desktops MCTS 70-624 <b>CERTIFICATION</b>	9
Windows Vista Configuration MCTS 70-620 <b>CERTIFICATION</b>	14
Windows Vista Enterprise Support MCITP 70-622 <b>CERTIFICATION</b>	8

Windows XP Application Support MCDST 70-272 <b>CERTIFICATION</b>	13
Windows XP Professional MCSE 70-270 <b>CERTIFICATION</b>	31
Windows XP System Support MCDST 70-271 <b>CERTIFICATION</b>	17

**Program 19: IT- Cisco Jobs Prep**

Course Package	Training Hours/Person
Cisco Related Series BCMSN 642-811 <b>CERTIFICATION</b>	25
Cisco Related Series BCMSN 642-812 <b>CERTIFICATION</b>	10
Cisco Related Series BCRA 642-821 <b>CERTIFICATION</b>	13
Cisco Related Series BSCI 642-801 <b>CERTIFICATION</b>	17
Cisco Related Series BSCI 642-901 <b>CERTIFICATION</b>	11
Cisco Related Series CCDA 640-863 <b>CERTIFICATION</b>	14
Cisco Related Series CCNA 640-801 <b>CERTIFICATION</b>	15
Cisco Related Series CCNA 640-802 <b>CERTIFICATION</b>	19
Cisco Related Series CIT 642-831 <b>CERTIFICATION</b>	18
Cisco Related Series ICND1 640-822 <b>CERTIFICATION</b>	11
Cisco Related Series ICND2 640-816 <b>CERTIFICATION</b>	5
Cisco Related Series ISCW 642-825 <b>CERTIFICATION</b>	11
Cisco Related Series ONT 642-845 <b>CERTIFICATION</b>	9

**Program 20: IT- Oracle Jobs Prep**

Course Package	Training Hours/Person
Oracle	36
Oracle 10g Administration	15
Oracle 10g Database Administration II 1Z0-043 <b>CERTIFICATION</b>	19
Oracle8	30
Oracle9i Database Fundamentals 1Z0-031 <b>CERTIFICATION</b>	29
Oracle9i Database Fundamentals II 1Z0-032 <b>CERTIFICATION</b>	24
Oracle9i Database Performance Tuning 1Z0-033 <b>CERTIFICATION</b>	18

Oracle9i SQL 1Z0-007 <b>CERTIFICATION</b>	24
---	----

Program 21: **IT-Professional Jobs Prep**

Course Package	Training Hours/Person
C	38
Client/Server Technology for Managers	7
Data Warehousing	5
DB2 Universal Database	32
FOCUS	55
ITIL Version 2 Foundation Certificate EX0-100 <b>CERTIFICATION</b>	3
ITIL Version 3 Foundation Certificate EX0-101 <b>CERTIFICATION</b>	13
Linux	27
Linux Red Hat Technician RHCT RH202 <b>CERTIFICATION</b>	24
Notes 5 Programming	22
Novell 560 CNE <b>CERTIFICATION</b>	28
Novell 570 CNE Advanced Administration <b>CERTIFICATION</b>	18
Object-Oriented Analysis & Design	6
OOP Using C++	38
Data Warehousing	5
DB2 Universal Database	32
FOCUS	55
ITIL Version 2 Foundation Certificate EX0-100 <b>CERTIFICATION</b>	3
ITIL Version 3 Foundation Certificate EX0-101 <b>CERTIFICATION</b>	13
Linux	27
Linux Red Hat Technician RHCT RH202 <b>CERTIFICATION</b>	24
Notes 5 Programming	22
Novell 560 CNE <b>CERTIFICATION</b>	28
Novell 570 CNE Advanced Administration <b>CERTIFICATION</b>	18
Object-Oriented Analysis & Design	6

OOP Using C++	38
PowerBuilder 9 Advanced Development	12
Rational Unified Process	18
RDBMS	4
RPG IV Programming	38
SAS	39
SAS 8	38
Solaris 8 System Administrator 310-011 <b>CERTIFICATION</b>	31
Solaris 9 System Administrator 310-014/310-015 <b>CERTIFICATION</b>	17
SQL for the Windows Environment	21
Sun Java 2 Developer SCJD CX-310-252A/CX-310-027 <b>CERTIFICATION</b>	10
Sybase	23
UML 2.0	9
UNIX Systems	39
Visual Basic 2005	7
Visual Basic 6	33
Windows 2000 Basics - Server	3
Windows Vista Upgrade	3

**Program 22: Project Management Job Prep**

Course Package	Training Hours/Person
Project Management	22
Project Management from a People Perspective	12
Project Management Professional Certification 2005 <b>CERTIFICATION</b>	12
Project Management Professional Certification 2009 <b>CERTIFICATION</b>	10

**Program 23: Census Job Prep (1.4 million jobs nationally)**

Course Package	Training Hours/Person
----------------	-----------------------

US Census Jobs Overview (Document)	1
2 US Census I-9 Eligibility Verification Form	1
3 Approved Forms of ID for Census Application	1
4 Employee Practice Test - English	1
5 Employee Practice Test - Spanish	1
Basics of Business Math Series	16
Building Relationships Series	5
Business Ethics Series	5
Communicating with Power Series	9
Create a Visual CV/ Resume	1
Dealing with Difficult People Series	8
Effective Business Communication Series	11
Effective Presentations Series	10
E-Mailing Your Way to the Top Series	8
Fundamentals of Business Management Series	10
Interview Skills Series	27
Negotiating Series	19
Stress Management Series	4
Teams That Work	4
Time Management for Maximum Productivity Series	6
Time Management Fundamentals Series	11

Program 24: **Business Management Job Prep**

Course Package	Training Hours/Person
Access 2007 Series	9
Basics of Business Math Series	16
Building Relationships Series	5
Business Ethics Series	5
Communicating with Power Series	9
Customer Service Series	23
Dealing with Difficult People Series	8

Effective Business Communication Series	11
Effective Presentations Series	10
E-Mailing Your Way to the Top Series	8
Excel 2007 Series	11
Fundamentals of Business Management Series	10
Interview Skills Series	27
Management Skills Introduction	7
Managing Change Series	5
Motivation Series	11
Negotiating Series	19
Office 2007 Series	17
Outlook 2007 Series	13
PowerPoint 2007 Series	20
Project Management from a People Perspective Series	12
Project Management Series	22
Sexual Harassment in the Workplace	3
SharePoint 2007 Series	14
Stress Management Series	4
Teams That Work	4
Time Management for Maximum Productivity Series	6
Time Management Fundamentals Series	11
Windows Vista Series	2
Word 2007 Series	14

**Program 25: Education/Health Services Jobs Prep**

Course Package	Training Hours/Person
Access 2003 Series	22
Access 2007 Advanced Series	9
Access 2007 Series	9
Effective Business Communication Series	11
E-Mailing Your Way to the Top Series	8

Excel 2003 Series	26
Excel 2007 Advanced Series	12
Excel 2007 Series	11
Fundamentals of Business Management Series	10
Internet Explorer 7 Series	2
Interview Skills Series	27
Introduction to PCs Series	35
Lotus Notes 8.5 Series	4
Outlook 2003 Series	25
Outlook 2007 Series	15
Paint Shop Pro 5 Series	9
PowerPoint 2007 Series	20
Project 2003 Series	30
Project 2007 Series	16
SharePoint 2003 Series	16
SharePoint 2007 Series	14
Time Management Fundamentals Series	11

**Program 26: Government Jobs Prep**

Course Package	Training Hours/Person
Access 2003 Series	22
Access 2007 Series	9
Basics of Business Math Series	16
Building Relationships Series	5
Business Ethics Series	5
Communicating with Power Series	9
Dealing with Difficult People Series	8
Effective Business Communication Series	11
Effective Presentations Series	10
Excel 2003 Series	26
Excel 2007 Series	11

Fundamentals of Business Management Series	10
Interview Skills Series	27
Management Skills Introduction	7
Managing Change Series	5
Motivation Series	11
Negotiating Series	19
Office 2007 Series	17
PowerPoint 2003 Series	25
PowerPoint 2007 Series	20
Project 2003 Series	30
Project 2007 Series	16
Project Management from a People Perspective Series	12
Project Management Series	22
Sexual Harassment in the Workplace	3
Stress Management Series	4
Teams That Work	4
Time Management Fundamentals Series	11
Windows Vista Series	2
Word 2003 Series	32
Word 2007 Series	14

**Program27: Small Business Jobs Prep**

Course Package	Training Hours/Person
401(k) Plans	3
Access 2007 Series	9
Budgeting and Saving Series	21
Business Ethics Series	5
Customer Service Series	23
Effective Business Communication Series	11
E-Mailing Your Way to the Top Series	8
Excel 2007 Series	11

Fundamentals of Business Management Series	10
Home Business Series	20
Interview Skills Series	27
Investing Fundamentals Series	22
Negotiating Series	19
Office 2007 Series	17
Outlook 2007 Series	13
PowerPoint 2007 Series	20
Project Management Series	22
QuickBooks 2004 Series	33
Retirement Planning Series	10
Stress Management Series	4
Teams That Work	4
Time Management Fundamentals Series	11
Windows Vista Series	2
Word 2007 Series	14

**Program 28: Office Jobs Prep**

Course Package	Training Hours/Person
Access 2003 Series	22
Access 2007 Advanced Series	9
Access 2007 Series	9
Business Ethics Series	5
Communicating with Power Series	9
Dealing with Difficult People Series	8
Effective Business Communication Series	11
Effective Presentations Series	10
E-Mailing Your Way to the Top Series	8
Excel 2003 Series	26
Excel 2007 Advanced Series	12
Excel 2007 Series	11

Fundamentals of Business Management Series	10
Internet Explorer 7 Series	2
Interview Skills Series	27
Introduction to PCs Series	35
Lotus Notes 8.5 Series	4
Managing Change Series	5
Motivation Series	11
Negotiating Series	19
Office 2007 Series	17
Outlook 2003 Series	25
Outlook 2007 Series	13
Paint Shop Pro 5 Series	9
PowerPoint 2003 Series	25
PowerPoint 2007 Series	20
Project 2003 Series	30
Project 2007 Series	16
Project Management Series	22
Sexual Harassment in the Workplace	3
SharePoint 2003 Series	16
SharePoint 2007 Series	14
Stress Management Series	4
Time Management Fundamentals Series	11
Windows Vista Series	2
Word 2003 Series	32
Word 2007 Series	14

**Program 29: Project Management Jobs Prep**

Course Package	Training Hours/Person
Basics of Business Math Series	16
Building Relationships Series	5
Business Ethics Series	5

Communicating with Power Series	9
Dealing with Difficult People Series	8
Effective Business Communication Series	11
Effective Presentations Series	10
E-Mailing Your Way to the Top Series	8
E-Mailing Your Way to the Top Series	8
Fundamentals of Business Management Series	10
Interview Skills Series	27
Management Skills Introduction	7
Managing Change Series	5
Motivation Series	11
Negotiating Series	19
Project 2007 Series	16
Project Management from a People Perspective Series	12
Project Management Professional Certification 2005	12
Project Management Series	22
Sexual Harassment in the Workplace	3
Stress Management Series	4
Teams That Work	4
Time Management Fundamentals Series	11

**Program 30: Other: Retail, Manufacturing, Hospitality, etc. Jobs Prep**

Course Package	Training Hours/Person
401(k) Plans	3
Access 2003 Series	22
Access 2007 Advanced Series	9
Access 2007 Series	9
Basics of Business Math Series	16
Budgeting and Saving Series	21
Building Relationships Series	5
Business Ethics Series	5

Communicating with Power Series	9
Computing Concepts Series	23
Crystal Reports XI Series	21
Customer Service Series	23
Dealing with Difficult People Series	8
Effective Business Communication Series	11
Effective Presentations Series	10
E-Mailing Your Way to the Top Series	8
Estate Planning Series	25
Excel 2007 Advanced Series	12
Excel 2007 Series	11
Fundamentals of Business Management Series	10
Home Business Series	20
Innovation in the Workplace Series	3
Internet Explorer 7 Series	2
Interview Skills Series	27
Introduction to PCs Series	35
Investing Fundamentals Series	22
Lotus Notes 8.5 Series	4
Management Skills Introduction	7
Managing Change Series	5
Motivation Series	11
Negotiating Series	19
Office 2007 Series	17
Outlook 2003 Series	25
Outlook 2007 Series	13
Paint Shop Pro 5 Series	9
PowerPoint 2003 Series	25
PowerPoint 2007 Series	20
Problem Solving Through Productive Thinking Series	3
Project 2003 Series	30

Project 2007 Series	16
Project Management from a People Perspective Series	12
Project Management Series	22
QuickBooks 2004 Series	33
Retirement Planning Series	10
SAP R/3 Release 4.6 Series	11
Sarbanes-Oxley Act Series	6
Sexual Harassment in the Workplace	3
SharePoint 2003 Series	16
SharePoint 2007 Series	14
Stress Management Series	4
Teams That Work	4
Time Management for Maximum Productivity Series	6
Time Management Fundamentals Series	11
Visio 2002 Series	36
Windows Vista Series	2
Word 2003 Series	32
Word 2007 Series	14

Program 31: **CERTIFICATION Healthcare Professionals:** Hours training/ person—  
Course to be developed

Program 32: **CERTIFICATION Healthcare Population Awareness—**Swine Flu,  
Diabetes etc.: Hours training/ person -- Course to be developed

Program 33: **CERTIFICATION: Energy Efficiency/Audit:** Hours training/ person --  
Course to be developed.

Program 34: **CERTIFICATION Public Safety—EMT:** Hours training/ person --- Course  
to be developed