



IROC Phase II

Concept of Operations/Location Study

Justification Analysis

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TABLE OF CONTENTS

JUSTIFICATION ANALYSIS

- 1. INTRODUCTION 1**
 - 1.1 Purpose and Objectives of the Justification Analysis 1**
 - 1.2 Overview of the IROC Concept..... 2**
 - 1.3 Agency Integration 3**
- 2. GROWTH IN IDAHO 4**
 - 2.1 Statewide Growth 4**
 - 2.2 Local Growth..... 5**
- 3. COLLOCATION BENEFITS 7**
 - 3.1 Benefits of Resource Sharing 7**
 - 3.2 National Experience..... 7**
- 4. IROC NEEDS ASSESSMENT 12**
 - 4.1 Phase I Needs Overview 12**
 - 4.1.1 IROC High-Level Needs 12*
 - 4.1.2 Phase II Requirements 13*
 - 4.2 Phase II Needs Overview..... 13**
 - 4.2.1 One-on-One Meetings 13*
 - 4.2.2 Scanning Tour 13*
 - 4.2.2.1 Minnesota RTMC..... 14*
 - 4.2.2.2 Austin CTECC 14*
 - 4.2.2.3 Las Vegas FAST TMC..... 15*
 - 4.2.3 Needs Comparison..... 16*
- 5. IROC PARTICIPANTS 18**
- 6. NEEDS/BENEFITS ANALYSIS TO SUPPORT IROC JUSTIFICATION..... 20**
- 7. JUSTIFICATION ANALYSIS FOR IROC CONCEPT..... 34**
- 8. CONCEPT OF OPERATIONS OVERVIEW 35**



TABLE OF CONTENTS

JUSTIFICATION ANALYSIS

LIST OF FIGURES

Figure 1 – Benefits for Houston TranStar – 1997 to 2004	11
Figure 2 –Benefit/Cost Ratios for Houston TranStar – 1997 to 2004	11

LIST OF TABLES

Table 1 – Examples of Other Collocated Operations Centers.....	9
Table 2 – Survey of Operation Centers with Police Collocation	10
Table 3 – Potential IROC High-Level Agency Roles	19
Table 4 – Idaho Transportation Department Needs/Benefits Chart	21
Table 5 – Ada County Highway District Needs/Benefits Chart.....	22
Table 6 – Valley Regional Transit Needs/Benefits Chart	24
Table 7 – State EMS Communications Center Needs/Benefits Chart.....	25
Table 8 – Ada County Emergency Services Needs/Benefits Chart.....	27
Table 9 – COMPASS Needs/Benefits Chart.....	28
Table 10 – Idaho State Police Needs/Benefits Chart.....	29
Table 11 – Ada County Sheriff Needs/Benefits Chart	30
Table 12 – Local Public Safety Dispatch Needs/Benefits Chart	31
Table 13 – Local Traffic Operation Centers Needs/Benefits Chart	32
Table 14 – Media Needs/Benefits Chart	33

1. INTRODUCTION

The Interagency Regional Operations Center (IROC) marks an important step for the Treasure Valley area and the state of Idaho toward more coordinated, comprehensive regional transportation management and emergency response. Idaho Transportation Department (ITD), Ada County Highway District (ACHD), and its public safety, emergency response and transit partners have established a vision and objectives for how transportation management functions, emergency and incident response, and transit operations should be approached to provide mutual benefit for key agencies as well as the traveling public. Each stakeholder group brings a unique perspective to the process and each has their own set of requirements, needs, challenges, issues and concerns. Collocating key functions has the potential to provide several benefits, but also requires careful planning for successful implementation.

1.1 Purpose and Objectives of the Justification Analysis

The purpose of this document is to begin to outline the potential benefits to transportation and emergency operations agencies by collocating and connecting key functions and operations. Justification for agency participation and operations from a centralized facility is based on the outcomes of one-on-one meetings with various stakeholders and a scanning tour of various collocated operations centers. Whether an agency decides to collocate within the facility or establish a communication and data link to the center, a very thorough analysis of the potential growth and possible benefits, marginal or dramatic, needs to be addressed by each agency. The concept of an integrated and coordinated operations facility is more than the physical facility – it represents a broader more comprehensive approach to regional operations, which will require some changes to how local and state agencies currently operate and interact.

In times of great expansion and possibilities, there are competing priorities for projects that could benefit the local area and the state. Federal, state and local funding are in high demand as the transportation network and emergency response needs grow with the increased demands on the region's transportation network, as well as with the stronger focus on more coordinated regional operations. Key considerations as part of this justification assessment and analysis needs to look at stakeholder buy-in and support at several levels. From a day-to-day operations perspective, agency operations and maintenance staff need to be involved and part of the planning and implementation process – without their support, the vision for IROC and the benefits it can bring to the region will be difficult to execute. On another level, the support of agency managers and authorities, as well as key decision makers for each agency (including elected officials), will be critical to helping make IROC implementation and operations a priority in the region. Benefits will need to be demonstrated to these key decision makers to build a strong case for funding the initial implementation, ongoing operations and expansion of the mission-critical functions of IROC operations. Through the information gathering that will be discussed in subsequent sections of this document, there are several issues and concerns that have come forth that will be the deciding factor for some agencies as to their level of involvement in the IROC. These concerns include:

- What are the costs of collocating/linking my agency to IROC?
- What are the operational or customer service benefits to my agency?
- Is there benefit to a 24/7/365 facility? What are the requirements of that type of facility?
- Are these agencies able to plan appropriately for expansion and needs 5 or 10 years ahead?
- What will be the governance structure of this facility?

- How would construction, operating and maintaining costs be covered? What are the fiscal implications to my agency of being involved with IROC?
- How will multiple jurisdictions be coordinated in the area?
- Will the combining of multiple agency resources into one facility diminish the individual attention given to customer service of each agency?

Keeping these questions at the forefront of the decision making process will help guide each agency toward the most beneficial decision for their future. Planning for future expansion is not a simple process because it is difficult for each agency to predict or understand what technology or useful system could be the best direction for their agency to expand into. Careful planning of the real functions that IROC will bring will ensure the greatest success of agency coordination and collaboration for the benefit of the local area and the state.

1.2 Overview of the IROC Concept

The vision of IROC is to “Create an Interagency Regional Operations Center to enhance the coordination and collaboration among the region’s transportation and public safety organizations”. The purpose of the Phase I IROC Feasibility Study (2005) was to investigate the need and feasibility for a centralized operation facility in the Treasure Valley. The intent of the study was to determine agency and organization participation and to allow the opportunity to become involved in the planning of the center. **Stakeholders reached a consensus that a multi-functional, 24/7/365 facility would benefit regional transportation and emergency management in the Treasure Valley.** Phase I concluded that there is interest among some stakeholders to collocate operations to achieve integration of information and decisions. Other stakeholders would like to continue their individual operations in separate locations with a dedicated communication link to achieve improvements in facilitating real-time information sharing. A vision, mission statement and list of functions were developed through workshops with key stakeholders throughout the region and representing statewide agencies such as ITD Headquarters and the State EMS Communications Center.

From an institutional perspective, the IROC presents a potential cost-savings and enhanced operations alternative to the current state of independent or individual operations throughout the Treasure Valley. Collocating multiple agencies and functions, such as transportation management, 911 dispatch, public safety, emergency services, transit operations dispatch and maintenance dispatch would require that many needs, expectations and issues must be addressed early in the planning process in order for the concept of a collocated center to move forward. From an operations perspective, the unique system hardware, communications, information sharing and information security issues will need to be carefully outlined and addressed. In the case of public safety dispatch, there are unique requirements that need to be factored in to the design, location and security requirements of the IROC.

Phase II, which is the focus of this study, is developing a Concept of Operations for IROC, and mapping out specific functions, collocated partners, connected partners, and implementation timeframes. This phase is also identifying facility location, space needs and requirements for partner agencies in the facility, and funding requirements.

1.3 Agency Integration

It is envisioned that the level of integration among IROC partners will vary. In some cases, there is a strong desire to collocate and potentially share resources among partners; in other cases, agencies have expressed an interest in a connection to IROC for information exchange only. Agencies that choose to be involved in the IROC could benefit greatly from the access to shared resources that could enhance the efficiency and level of service to its customers which otherwise would not be available. For example, shared view of arterial and freeway cameras provides not only the traffic operations agencies the ability to manage the roadways but also allows the appropriate emergency management agencies to monitor and more efficiently respond to incidents on the roadways. In the event of a transit emergency such as a hostile passenger with a weapon, cameras on-board the transit vehicle can be viewed by not only the transit agency in the center, but also by the public safety agencies in order to appropriately respond to the incident.

Collocating in the IROC could mean that for the same cost or potentially less overall costs of operations, each agency could provide a much better service to its customers. A scanning tour of various collocated facilities provided the stakeholders of IROC with benefits and lessons learned from other centers. Even with established operations facilities that were toured (including Minnesota's Regional Transportation Management Center, Austin Emergency Operations Center and the FAST TMC in Las Vegas), collocation doesn't always translate to full integration of collocated systems. Bringing agencies together 'under one roof' is one scenario, but then how to best integrate and connect systems for true interoperability and integration is still not fully realized even by some centers that have been in operation for several years. Defining each agencies needs, service, and benefits of involvement with the IROC is important in understanding how the agencies will be incorporated into the structure of the IROC, as well as the level of integration among agencies in the facility.

2. GROWTH IN IDAHO

As the population grows in Idaho, the transportation network and emergency response capabilities have to grow with the increased demand. The population in the Treasure Valley particularly is up 44% since 1990 and by 2030 the population will grow another 60%. Vanpooling, carpooling, commuter buses, park and rides, high-occupancy vehicle lanes, telecommuting, bicycle and pedestrian facilities, and other alternatives will be integrated and prioritized over the next 15 years throughout the state. As travel increases, so do the delays experienced by travelers. The Communities in Motion plan mentioned in a later section concludes that, if nothing is done to improve the situation, travel times could increase between certain locations up to 50%. The following sections provide an overview of the growth in the state as well as in the Treasure Valley. The IROC facility could encompass many service areas and increased populations and expansion of the transportation network greatly affects the ability of each collocated or linked agency to provide effective customer service to the public within their service area.

2.1 Statewide Growth

According to the U.S. Census Bureau, Idaho's 10.4% population growth over the last five years and 28.5% increase from the ten years prior indicates a healthy migration of people into the state. Idaho is the sixth fastest-growing state in the country. With increasing populations in both urban and rural communities, the efficiency of the state's transportation network and emergency management capabilities are being addressed. The Idaho Transportation Department has developed plans to expand their ITS systems throughout the state and support local counties and cities in their efforts to implement local ITS systems. The statewide implementation of additional variable message signs, road weather information system sites, cameras, highway advisory radio sites, and vehicle detection systems will help to manage the growing travel demand on the state's highway system. Improvements to the CARS/511 system will also benefit travelers through expanded features and more real-time information. As the population expands into more rural areas of the state, the emergency response and incident management capabilities are expanding their service areas and resources to accommodate the growth.

The following list of public opinions was taken from the ITD Traveler Opinion and Perception (TOP) Survey conducted in April 2005 that surveyed people in each district about Idaho's transportation network:

- Nearly all Idahoans have access to a car which they use on a nearly daily basis, relatively few (5%) use public transportation.
- More travelers are very satisfied with their commute trips than with their non-commute trips.
- Travelers living in District 3 – includes the Treasure Valley – are the most dissatisfied with their commute travel – 23% dissatisfied.
- Highway/roadway safety is the most important system characteristic to travelers.
- The quality of the transportation system rates poorest by travelers for planning, pavement conditions, and reducing delays from road work.
- Potential issues for District 3 include efforts to reduce congestion and improve traffic flow, planning for future transportation needs, reducing delays from road work, and visual appeal of the transportation network.
- Idahoans see a greater need for transportation alternatives to serve those without cars than as a means to reduce congestion.

- Idahoans are most likely to support funding options they are familiar with, but are less likely to support further increases in fuel taxes to support transportation improvements.

2.2 Local Growth

The pace of growth in the Treasure Valley area has provided numerous opportunities and challenges to the traveling public. There are two plans being developed to map the future roads, residential and commercial development in the Treasure Valley. The first version, called “Community Choices,” is an ideal growth scenario for the valley that planners will use to draft Communities in Motion – a long-range, six-county transportation plan – and Blueprint for Good Growth – a land use and transportation plan for Ada County. The second version, called “Trend,” shows what the valley will look like if current sprawl development patterns continue. Sprawl is the scattering of urban settlement over the rural landscape at a lower population density than would be deemed as an efficient use of land. As the population decentralizes and growth spreads farther from the center, the ability to provide efficient, and self-supporting multi-modal transportation improvements becomes more difficult. This will make the long-term, area wide goal for non single-occupancy vehicle alternatives of 25% of travel, as discussed in the Communities in Motion Long-Range Transportation Plan, a difficult one to achieve in the Treasure Valley particularly. According to the Trend Forecast in that document, the following are some statistics about the growth of the Treasure Valley:

- The combined population of Ada and Canyon County is projected to grow 26% by 2015 and 57% by 2030, and the populations of these counties have increased by roughly 30% since 2000.
- Number of households and number of jobs are forecasted to increase by roughly 13% every five years over the next 25 years.

Growth statistics and land use patterns bring forth many concerns to travelers in the Treasure Valley. Some of the concerns and thoughts of the Treasure Valley public as documented in the 2002 Final Report from the Regional Transportation Task Force include:

- The transportation infrastructure is strained and pushing capacity, especially at peak commute times, public supports the need for improving capacity and efficiency of current systems and corridors in favor of increasing roadway size;
- Need better coordination and communication among agencies, including cities, highway districts and the state;
- Land use planning and transportation planning are not coordinated – sprawl development has occurred;
- Traffic congestion makes moving through the valley difficult, in part due to poor traffic signal timing;
- Need an education campaign for the public and more specifically the business community regarding existing and future services and the benefits of public transportation;
- If public transportation is not convenient and cost effective, the public will not use it, need to break free from the “western” mentality of driving alone;
- There are not enough river crossings or interchanges along I-84, increases traffic congestion throughout the valley;
- Need a public transportation that is convenient, 24/7, and more efficient than the automobile and is built around major centers such as Boise State University, the airport, and downtown;

- A regional (Caldwell to Mountain Home) public transportation system could reduce traffic congestion and encourage travelers towards using transit network;
- Highway/roadway safety is the most important system characteristic with pedestrian safety and mobility, bridge conditions, and planning for future transportation needs following in level of importance to Idahoans;
- Overall, Idaho's transportation system gets a C plus grade with the highest grade received for the conditions of its bridges;
- Planning for future transportation needs, pavement conditions, and efforts to reduce delays from road work need to be improved substantially;
- Public is more likely to support projects that add capacity to the road network, public transportation resources, pedestrian walkways and bicycle lanes;
- While roadway safety is a system strength, increased investments in number and length of passing lanes, rumble strips to reduce roadway departures and pavement markings could lead to a substantially improved overall safety grade.

Public outreach has been key in developing the two expansion plans. As the region grows its population, housing, and business network, the transportation system will need to expand accordingly. **Multiple planning efforts have concluded that there are two reoccurring public opinions; there is a need for more public awareness of changes that happen in the valley and a need for increased coordination and communication between agencies in the valley.** The first opinion states for example that widespread public outreach programs to promote an improved public transportation network and the benefits of that network could increase the usage of that system and could begin to change the "western" mentality of transportation. The IROC facility serves as a means to a solution for the second opinion. In an effort to promote better communication and minimize jurisdictional and operational separations between agencies, IROC could serve as the foundation for interagency coordination. The IROC could also benefit the public by increasing awareness through direct communication with the media and other outreach efforts.

The travelers of the area are rightfully concerned with the tremendous growth in the valley. The goal of the IROC is to enhance the coordination and collaboration among the region's transportation and public safety organizations and through that could come more effective public outreach and useful traveler information services. The public has a need for the IROC and stakeholders have additional well defined needs of the facility as outlined in the next sections.

3. COLLOCATION BENEFITS

3.1 Benefits of Resource Sharing

Coordination among multiple agencies has long been proved to be critical to successful transportation management in regions of various transportation characteristics. Interagency coordination can be deployed through telephone, fax, or other telecommunication media among agencies far away from each other. The more efficient and effective practice, however, is to locate multiple agencies including transportation operation for freeways and arterials, law enforcement, emergency response, and transit agencies in the same facility in order to achieve optimal level of communication and coordination. In the past a few years, many researches have been conducted regarding the benefit from operations collocation with other agencies. The “Emergency Management Agencies and Transportation Management Centers Integration” summarizes the benefits of sharing resources between other agencies and transportation operations through collocation. These benefits include:

- Improved access to better/additional information for both the Emergency Operations Center (EOC) and TMC;
- More efficient incident management, reducing delays and emergency response. This is particularly important during major incidents as well as emergencies (i.e., floods, hurricanes, tornados, etc.) in the sharing of agency resources;
- Coordination of operations; scheduling of impromptu meetings; resolution of conflicts at the lowest responsible level; and implementation of standard operating procedures/protocols. Daily interaction aids in the opportunity to understand operations of other organizations;
- Improved coordination on cross-agency planning efforts and project development;
- People integration in developing trust and understanding among personnel as well as improved morale. It creates an understanding among the partnering agencies of each other’s activities, needs and resources that would not be possible from meetings alone;
- Reduce redundancies in space, technology and equipment requirements as compared to virtual connection among separate facilities;
- Flexibility to fund initial design/construction costs as well as recurring operations and maintenance costs. For example, while emergency management agencies may not be able to contribute prominently to development costs, they may be able to offer significant cost sharing during subsequent years as a result of potential homeland security funding;
- Enables closer integration of ITS subsystems as the various agencies’ components could be connected to a central computer system, enabling each partner to access all data collected and to control each others cameras;
- Facilitates regional police/safety staff integration as such staff could be assigned to only one facility versus several facilities; and
- Opportunity to work with media outlets more effectively.

3.2 National Experience

There are a number of collocated operations centers throughout the country that offer valuable information regarding the benefits of collocation. These centers incorporate some combination of state transportation departments with state police, emergency management, local traffic operations, and transit agencies. While the extent of the service area of agencies involved differ



from center to center, the benefits that have been realized from each center can be used to highlight the value of a collocated facility. Quantifiable benefits such as percent of reduced response time or number of vehicle-hours saved in a particular area are a function of many factors, not just the population served by the center. Such factors include the extent of ITS systems in place in the region that result in such benefits as reduced traffic delay through the use of ramp metering systems. The quantifiable benefits for each of the centers described in **Table 1** below can not be scaled proportional to the population the IROC facility could serve due to the numerous other factors involved in calculating those benefits. Examples of these collocated operations centers from around the country are shown in **Table 1** which offers various benefits and service area information for each operations center.



Table 1 – Examples of Other Collocated Operations Centers

Center	Agencies	Linked Agencies	Service Area	Benefits
Houston TranStar (Houston, Texas)	TxDOT Metropolitan Transit Authority of Harris County (METRO) Harris County Traffic Engineering Harris County Emergency Management City of Houston Dispatch	Motorist Assistance Program Media Operation Respond	- Estimated population of 2,016,582 - 1,788 square miles	- 12.7 million vehicle-hours - benefit/cost ratio of 11.6 - improved response time to accidents, natural emergencies and other incidents - affection transit service and general traffic flow - reduced costs for data collection - improved dissemination of traveler information to the public - cost effective utilization of vehicle fleets created by centralizing dispatch functions
SMART SunGuide (Fort Lauderdale, Florida)	FDOT District 4 Broward County Traffic Engineering Division Florida Highway Patrol Broward County Transit	Road Ranger Service Patrol Road Watchers FDOT District 6 Florida's Turnpike Enterprise SmarTraveler Broward County MPO Media	- 83.55 highway miles	- availability of information via the website and 511 - faster emergency response times - 22% reduced roadway clearance time - reduced traffic delay due to incidents - 2.7 million vehicle hours - benefit/cost ratio of 10.44 - total benefit for 2005 was \$86,002,364 - benefit/cost ratio from 2004 to 2005 increased by 27%
CalTrans District 12 TMC	Caltrans District 12 California Highway Patrol	City of Anaheim City of Santa Ana City of Irvine Orange County	- Estimated population of 2.8 million - 34 cities - 137 highway miles - 800 square mile area	- reduced congestion - improved safety - enhanced mobility or travelers - increased efficiency of the transportation infrastructure - reduced use of energy - reduced pollution - reduced response time to incidents
San Antonio TransGuide (San Antonio, Texas)	TxDOT City of San Antonio VIA Metropolitan Transit	Other Traffic Operations Centers Media	- Estimated population of 1,498,672 - 87 miles of San Antonio currently - goal of 289 miles of highways	- reduced primary accidents by 35% - reduced secondary accidents by 30% - reduced inclement weather accidents by 40% - reduced overall accidents by 41% - average reduction in response time of 20% - average delay savings of 700 vehicle-hours - fuel consumption decrease of 2600 gallons per major incident translating into an annual savings of \$1.65 million - driver response to posted traveler information instructions improved from 33% before TransGuide to 80% after implementation of TransGuide
Maryland Statewide Operations Center (Hanover, Maryland)	Maryland Department of Transportation Maryland State Police Maryland's Emergency Operations Center	Satellite Traffic Operations Centers	- 357 miles of highways - 170 miles of arterial roads	- reduced incident response time - reduced incident clearance time - reduced traffic delay due to incidents - reduction in secondary accidents - reduction in fuel consumption and emissions
VDOT Public Safety and Transportation Operations Center (PSTOC) (Fairfax County, Virginia) (Operational November 2007)	VDOT's Northern Virginia Smart Traffic Center VDOT's Northern Virginia Police Communications Center Police Department Forensics Virginia State Police Division 7 Department of Public Safety Communications 911 Call Center Office of Emergency Management	Fairfax Connector - Transit Washington Metropolitan Area Transit Authority Virginia Railways Express	- Estimated population of 1,041,200 - 395 square miles	goals are: - maximize resources/minimizes costs - improve emergency preparedness, coordination and response - increase public safety - better manage traffic congestion - better manage the response to and recover from major emergencies

A survey conducted in 2002 by Texas Transportation Institute specifically on the benefit of TMC collocation with police had found that all of the TMCs that are collocated with the police found some benefits to this arrangement. At the Capital Region TMC in Albany, New York, the best incident detection that is available is through 911 cellular telephone calls, which are received by the State Police that are located at the center. Therefore the TMC is immediately notified of an incident on the roadway. The DOT can immediately begin to handle the incident before or as the public safety personnel are receiving the initial dispatch to respond. The TMC in East Baton Rouge sees an overall improvement in incident management. Having the advanced traffic management system, Highway Patrols, and the 911-dispatch center located together helps to quickly detect and respond to incidents. At the TMCs in New Jersey, the police collocation has improved the relationship with the State Police dispatch centers and DOT has begun to use the State Police radio system. **Table 2** below summarizes the survey to TMCs with police collocation.

Table 2 – Survey of Operation Centers with Police Collocation

TMC	Is there an improvement incident detection?	Is there a good working relationship?	Do traffic engineers and police have different priorities that could cause conflict?	How is the decision-making process handled?	Is there an agreed upon dispute resolution protocol?	Additional benefits to police co-location?
Houston TranStar	Yes	Yes	Yes	Defined Management Structure	Defined Management Structure	Traffic engineers and police realize the impact of their actions on the other
Smart Traffic Center	No	Yes	No	Monthly incident management meetings	Incident Management Manual	None
East Baton Rouge	Yes	Yes	No	Regional Incident Management Plan	No	Overall improvements in managing incidents
Capital Region	Yes	Yes	Yes	Incident Command System	Police have the final say	Police operate center during off-hours and improved response to incidents
New Jersey	Yes	Yes	No	Collaboratively between the agencies	Police have the final say	Advanced the program to other State and local police

A significant example of successful collocated multi-agency coordinated transportation management is the Houston TranStar. TranStar is the partnership among TxDOT, Metropolitan Transit Authority of Harris County (METRO); Harris County; and City of Houston. **Figure 1** and **Figure 2** below graphically represent the benefits in terms of number of dollars saved by the successful operations of having a collocated TMC and the corresponding benefit/cost ratio. Cost savings are shown to have increased steadily from 1997 between 16% and 38% each year for the first five years and increased a dramatic 58% from 2003 to 2004. The corresponding benefit/cost ratios have fluctuated at a different pace based on the cost of the TMC that particular year, however improving over time as well. These figures from the Houston TranStar show that the collocation of various operations provided a cost savings benefit that could potentially have a similar effect of increasing over time for the IROC facility.

Figure 1 – Benefits for Houston TranStar – 1997 to 2004

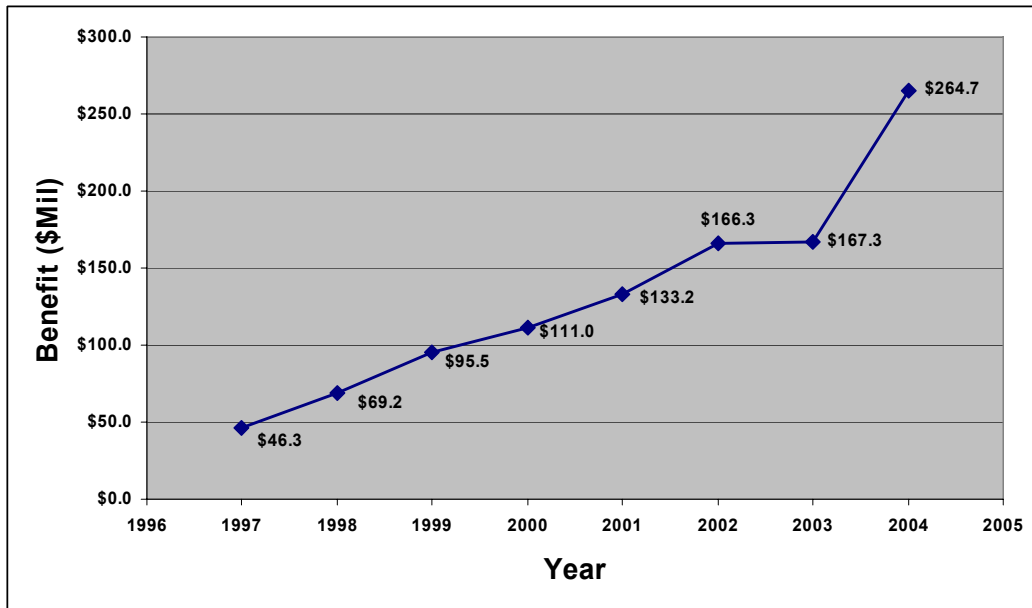
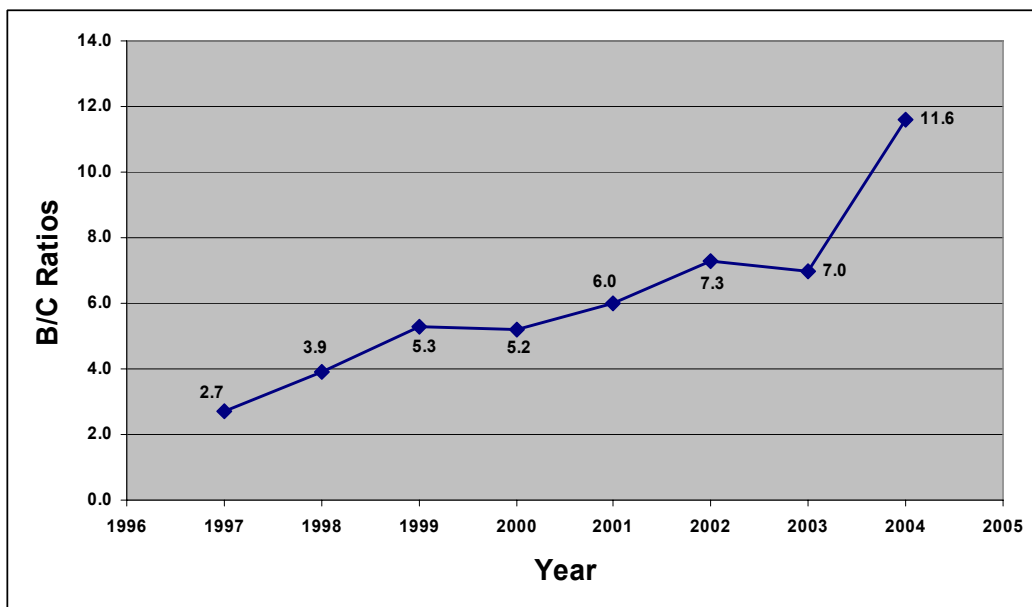


Figure 2 – Benefit/Cost Ratios for Houston TranStar – 1997 to 2004



4. IROC NEEDS ASSESSMENT

4.1 Phase I Needs Overview

The feasibility of an interagency operations center in the Treasure Valley was investigated through information gathering from the various agencies in the region as part of the initial effort of the IROC project. This process was designed to be a phased project that first defined the need for an IROC in the Treasure Valley and then would begin to develop more detailed functional requirements, identify key partners and develop an implementation plan. The key result from Phase I was that a multi-agency operations center that could be operational around the clock and one that could have the opportunity to expand with the growing population over time could provide the most cost-effective solution to the growth of the Treasure Valley. Enhanced agency collaboration and coordination could improve agency relationships located in the Treasure Valley. These improved relationships facilitate greater understanding of needs and requirements, sensitivity to other agency's policies and procedures, and development of more effective customer service and response strategies.

4.1.1 IROC High-Level Needs

Functions were identified by stakeholders in Phase I which could support a successful new center. These are categorized by operations of the IROC facility and the actual design and layout of the facility. These include:

Operational Needs:

- High performance
- Sustainable
- Cost savings
- Facility security essential
- Improved customer service
- Take advantage of joint agency infrastructure and use it to its greatest potential
- Need to design communication network into new facility to last 20 years
- Data security needed
- Agencies need to participate in funding the new facility
- Consider using private sector or an interagency management team to oversee center operations and/or management
- Agencies will still need back-up centers and communication ties

Facility Needs:

- Training room needed
- Need an Emergency Operations Center (EOC) in the new center
- Build facility to have extra room for future use
- Build facility that can be expanded in the future
- Radio/television studio needed in facility to be separate from main operations floor

Many of these needs were addressed individually by the participants of the one-on-one meetings and scanning tour and will be discussed further in the following sections.

4.1.2 Phase II Requirements

As part of the Phase I Feasibility Study, some of the key high-level requirements that need to be further defined as part of the Phase II effort were developed. The requirements include:

- Assessing the involvement of various agencies throughout the Treasure Valley either collocating or communicating directly with IROC.
- Identifying an appropriate location, size, layout, physical relationship of spaces within the center (both operational spaces and training, conference, administrative and amenities).
- Equipment needs, including workstations, map and video displays, communications, equipment storage and requirements. These needs will be outlined for all participating partners.
- Communications requirements to support internal system communications, links with external agencies, and data/system communication security.
- Amenities and requirements for a 24/7/365 facility, including controlled access and security issues and well as support areas.
- Environmental issues that consider equipment temperature requirements, lighting, air conditioning and ventilation.
- Site access and circulation, parking and perimeter security.

4.2 Phase II Needs Overview

4.2.1 One-on-One Meetings

In an effort to identify the needs and requirements of each agency, one-on-one meetings were held with key stakeholder agencies in the region, including public safety (ISP, Ada County Sheriff, Bureau of Homeland Security, Boise and Nampa Police), Valley Regional Transit, Ada County Emergency Services, Ada County Highway District, State EMS, and ITD (Headquarters and District 3). The purpose of these interviews was to discuss these individual agency perspectives and goals, and their vision for participation in an IROC facility and regional operations partnership, as well as some key concerns that these potential partners might have about their participation or about the concept of the facility in general. Benefits – to partner agencies and to regional operations – also were a focus of the individual agency meetings.

4.2.2 Scanning Tour

Representatives from potential IROC partners participated in a scanning tour of other operations centers in the country (Minneapolis, Austin and Las Vegas) in June 2006. These included:

- Idaho Transportation Department
- Ada County Highway District
- Idaho State Police



- Idaho Health and Welfare
- State EMS Communications
- COMPASS
- Valley Regional Transit

Participants were able to tour and interact with agency staff in three collocated facilities, each with very different occupying agencies and operations environments. This provided them the opportunity to see first hand the design and day-to-day operations of a collocated operations center and understand better the space and functional requirements of each agency as they relate to the facility. There is tremendous benefit to learning from the experiences of other regions that have worked through many of the same institutional, technical, security and policy issues facing the IROC partners. While there is no ‘one-size-fits-all’ approach that can or should be applied to a collocated operations center, a scanning tour of collocated facilities, including in-depth and frank discussions with partner agencies in those facilities has yielded valuable insights about some of the very same issues that will need to be worked through for the IROC concept. The scanning tour helped to better understand the functions of the centers that work well and those that do not work well in order to apply those lessons learned to the design of the IROC. The following sections provide an overview of functions and operations of each facility toured as well as a description of the positive and negative features of the facility and its operations. More detailed information about the scanning tour observations is documented in a separate deliverable (“Scanning Tour Summary”).

4.2.2.1 Minnesota RTMC

The Regional Transportation Management Center (RTMC) is located in Roseville, Minnesota. This new 53,000 square-foot facility with a 10,000 square-foot operations center integrates Minnesota DOT maintenance dispatch and traffic operations with Minnesota State Patrol dispatch into a unified communications center. The freeway and motorist assist patrol also is dispatched by the RTMC.

The Mn/DOT RTMC includes collocated emergency management, transportation, public safety, but does not include any transit agencies or county/municipal traffic operations. The operations center provides a good amount of workspace for each person on the operations floor because there are a limited number of people on the floor even during the peak periods. Video walls and workstations are separated by agency which did not encourage the shared resources and agency collaboration that IROC partners have indicated is a high priority for the Treasure Valley. Essential agencies that required collocation to be more efficient are Minnesota State Patrol and Mn/DOT. Mn/DOT serves as the landlord, and MSP is a tenant. Cities and transit were not recommended to be collocated during the initial design of the RTMC because they benefit from the receipt of information from the RTMC, not necessary from information transfer within the RTMC.

4.2.2.2 Austin CTECC

The Combined Transportation, Emergency & Communications Center (CTECC) managed by the City of Austin for the City of Austin, Travis County, Texas



Department of Transportation and the Capital Metropolitan Transportation. The facility consists of a 75,000 square-foot emergency operations building and 5,600 square-feet in utility and support buildings. Key services and functions include include:

- Freeway management system
- CAD (Computer Aided Dispatch)
- 9-1-1 Dispatch
- 3-1-1
- Fire, A/TCEMS and Police Records Management System
- Regional Radio System
- CAP Metro Fixed Route Dispatch

Upon entrance to the facility, the CTECC provides more security than other toured facilities (gate access to parking lot, sheriff officers at front desk signing people in, and card access is required beyond the lobby) but does not provide that same security to the centralized EOC. The EOC was an impressive, state-of-the-art facility, including workstations and laptops that could accommodate over 45 people. The floor area, although crowded, housed several agency operators and dispatchers, including TxDOT, EMS dispatchers, transit dispatch, 311 operators, and Sheriff dispatch. Expansion plans are underway for the facility to double in size – although there are no new agencies planned for collocation, there is a need for more space for existing agency operations. A centralized video wall allows all agencies on the floor to view camera images. Additional screens were added near the EMS dispatch which provides a visual of the vehicle AVL locations and current call-outs. A ‘stock ticker’ provided for 911 dispatchers was helpful to report performance measurements of such measurable quantities as length of call, dropped calls, abandoned calls. This center also provided a 24/7 IT support person to assist all agencies which minimizes downtime of operations. Another helpful feature is the media staging area outside the facility

4.2.2.3 Las Vegas FAST TMC

FAST was the newest of the centers visited on the scanning tour. The FAST TMC is a shared facility between Nevada Highway Patrol (NHP), and the Freeway and Arterial System of Transportation (FAST), which includes freeway and arterial operations and management (Nevada DOT, City of Las Vegas, City of Henderson, City of North Las Vegas and Clark County). The facility is approximately 66,670 square feet, of which FAST occupies approximately 20,000 square feet. The main control room is 3,200 square feet, and includes 10 transportation system operator consoles and 10 state patrol dispatch consoles. A centralized wall is the focal point of the operations center. In addition, the FAST TMC also includes a maintenance station designed for three NDOT Maintenance and two construction division crews. These will be relocating to the FAST TMC in the near term.

A key aspect of the FAST center is the fact that it is a publicly-accessible NHP building – there are certain NHP functions (crash records/reports, tickets, etc.) that are available to the public, and as such, there are not strict security measures in place in terms of perimeter security or access through the front door. The public



must sign in at the front reception area, which also includes NHP customer service counters, a media room and training room. Access beyond these areas required a card.

Key features of the FAST TMC that were identified during the tour of the facility that could be beneficial to consider for IROC include centralizing the EOC over the floor operations of the center and to provide a common communications room but separate server rooms to maintain individual agency access and security of information. Some features that should be addressed as part of the IROC design include the maintenance of the facility and the meeting room sizes. Meeting rooms that should be larger in this facility to support the number of people and agencies that need the rooms include the EOC, media room, conference room, and incident room. It is important to note that the FAST TMC does not have an EOC – the EOC is located in a different facility (Clark County complex). There is a ‘war room’ in the FAST TMC that serves as a multi-agency meeting center, and is situated over the operations floor. This room has been utilized for large-scale event management, including New Year’s Eve.

4.2.3 Needs Comparison

The information obtained from the one-on-one meetings and the notes from briefing meetings throughout the scanning tour were compared to find similarities where agency needs and desires could be addressed simultaneously. There were many functions and design concepts that were identified by participants to be beneficial to the IROC. Some initial feedback and design considerations from stakeholders that participated on the tour included:

- Locating facility in a geographically-neutral location in the Treasure Valley that is accessible by highways and is centralized to all public safety dispatch;
- Centralizing EOC that could have the capacity to accommodate all potential agency needs;
- Providing one video wall for viewing by all agencies rather than individual video walls;
- Video wall should include freeway as well as arterial camera video images to satisfy needs by multiple agencies;
- Developing Standard Operating Procedures (SOPs) which are important to provide to each agency collocating;
- Keeping SOPs up-to-date as expansion occurs and new agencies collocate after initial development of the facility;
- Develop interlocal and lease agreements for agencies collocating;
- Providing a well designed security check-point with agreed upon methods of security such as metal detectors and assigned badges;
- Providing a redundant back-up facility to IROC for support;
- Making sure the break room and facility is clean and sanitary from an employee comfort and health perspective;
- Designate adequate space for conference rooms used for various purposes; and
- Providing facilities or space for the media, such as an external and internal cable patch panel for easy access to power and video feeds.



The scanning tour was beneficial in gaining stakeholder consensus on functions and operational characteristics for the IROC. These criteria defined above will be addressed in the operational concept and incorporated into the final design of the IROC.

Each site visited was asked to provide detailed cost/benefit information that quantifies the benefits of their collocated operations. Although none of the centers has done a detailed cost/benefit analysis, each expressed strong benefits to their collocating strategies. Most of these benefits are somewhat anecdotal – each center had cited instances where the communications and proximity of public safety dispatch and transportation management proved incredibly beneficial. One such instance was in Austin, Texas. A major accident on one of the freeways had call-outs with multiple injuries, and EMS services were dispatching response units to the scene. With the EMS operators located directly adjacent to the TxDOT operators, and with access to the freeway video, EMS dispatch could see that the freeway was experiencing such congestion; there was no way that an ambulance could have made it to the scene in time. EMS was able to dispatch out the Angel Flight helicopter ambulance instead, which was able to get to the scene much faster than an ambulance trying to get through congested traffic. This kind of interaction – which has the potential to save valuable minutes when responding to an incident – is a testament to the success of that center's collocation strategy.

5. IROC PARTICIPANTS

As the IROC concept develops, it is important to understand how agencies will fit within the structure of the facility. Determining which agencies will occupy the new center impacts the design characteristics of the center such as building size, layout, and possible location. Each agency involved could both support the operations of the facility and benefit from the collocated resources in some capacity depending on the role the agency has taken in the development of the IROC. The matrix as shown in **Table 3** will outline general agency roles, as defined by the stakeholders, in the organization of the IROC facility. Agencies that have been included in the matrix are all potential partner agencies in the Treasure Valley that could affect the design and development of the IROC, even if they are not collocating. This initial matrix will be used in stakeholder workshops to develop more defined agency functions and responsibilities. Roles that are used to develop this matrix include:

- **Occupant** – These are agencies that will be collocated in the IROC facility. These agencies will benefit by sharing the resources in the facility but will be providing the collaborative information to other agencies that are not collocating in the facility.
- **Stakeholder** – These are agencies that are recipient of services that occupants of the IROC facility will provide to them through a direct communication link.
- **Authorizing** – These are the boards and commissions that will need to be involved to give approval regarding fundamental services of facility and funding assistance to the facility.
- **Governing** – These are agencies that will be involved in the operating board that will have one vote each as to deciding the direction of changes in IROC functions and operations.
- **Benefactor** – These agencies will benefit directly from the shared resources within the facility, but will not be involved in the operations or decision-making of the facility. Benefits will include traveler information dissemination to public through media, research by universities, special interest groups and transportation advisory boards among others.
- **Supplier** – These agencies will provide a necessary product or service to the IROC facility and support for such equipment.

Table 3 – Potential IROC High-Level Agency Roles

Agency/Organization	Potential Role					
	Occupant	Stakeholder	Authorizing	Governing	Benefactor	Supplier
Idaho Transportation Department (ITD)	✓	HQ; D3	State Transportation Board	TBD	✓	Funding, Resources
Idaho Department of Homeland Security	?		Director	TBD	✓	
State EMS Communications Center	✓	Dispatch	Legislative action	TBD	✓	Resources
Idaho State Police	?	Dispatch	Director	TBD	✓	Resources
Idaho Department of Administration	X			TBD		Facility?
Ada County Highway District	?	Operations	ACHD Commission	TBD	✓	Resources
ValleyRide	?	Operations	VRT Board	TBD	✓	Resources
Ada County Emergency Services	?	Operations			✓	
COMPASS	?	Staff	COMPASS Board	TBD	✓	Funding
Ada County Sheriff	?	Dispatch			✓	
Canyon County Sheriff	?	Dispatch			✓	
Gem County Sheriff	X	Dispatch			✓	
Local Public Safety Dispatch	X	Dispatch			✓	
Local Traffic Operations Centers	X	Dispatch			✓	
Boise State University	X	Research			✓	
University of Idaho/NIATT	X	Research			✓	
Media (TV/Radio)	?	Broadcast		TBD	✓	
Private-Sector Equipment Vendors	X				✓	Equipment, services
Federal Highway Administration (FHWA)	X				✓	Funding
Adjacent States/DOTs (WA, OR, NV, UT, WY, MT)	X				✓	

X – Does not plan to fit that Potential Role

? – Have not determined whether that agency will fit that Potential Role, need more information

✓ – Plans to fit that Potential Role



6. NEEDS/BENEFITS ANALYSIS TO SUPPORT IROC JUSTIFICATION

The success of the collocated center will be achieved when the operations of the center are agreed upon based on the needs and resources of each agency that is involved in the IROC. In order to gain consensus on an implementation strategy and design requirements for the center, stakeholders have been involved in various information gathering meetings to begin to outline their specific needs and benefits. More discussions about functional needs and relationships will occur through the development of the Concept of Operations.

This information is outlined in the following tables for each agency that has expressed interest in becoming involved with the IROC either by collocating operations or communicating by means of a direct link to the center. Identifying the similarities and differences of each agency's needs and benefits through the use of the set of tables will shape the operational concept into an effective solution that benefits all parties involved. As part of the Justification Analysis, it is important to identify what each potential partner needs, can bring to the IROC concept, and how participation could benefit them. Identifying up front the specific needs and benefits of each agency promotes greater sensitivity to other agency's policies and procedures and collaborative development of more effective customer service. Brief descriptions are provided of key stakeholders for whom **Tables 4-14** were developed.



Table 4 – Idaho Transportation Department Needs/Benefits Chart

Idaho Transportation Department (ITD) – Impacts involve all modes of transportation and the department works closely with local governments, regional planning organizations, the state’s leadership and the public to address the transportation needs throughout the state. Construction projects around the state that contribute to the safe and efficient roads, bridge, airports, railroads, and ports are funded by federal, state, and local governments and various grants. ITD represents both Headquarters and District 3 operations in the Treasure Valley.

What does ITD need from IROC?	What does ITD get from IROC?
<ul style="list-style-type: none"> ▪ Statewide as well as regional coverage of ITD operations assets on 24/7 basis ▪ Well defined Standard Operating Procedures for agency collocation ▪ Public meeting rooms need to have enough capacity for media and public ▪ Plan for expansion of not only allotted space for each agency, but for equipment, storage, meeting, server and other rooms in the facility ▪ Develop sufficient back-up contingencies for each agency ▪ Maintain primary control of resources and shares resources as needed ▪ Develop thorough state-local agreements for the sharing of resources between ITD and other agencies ▪ Closer coordination with key partners for freeway management (State EMS, ACHD) and freeway incident management 	<ul style="list-style-type: none"> ▪ Centralized and cooperative operations center for Treasure Valley and Statewide ▪ Potential to consolidate operations including sign and signal shops and Incident Response ▪ District 3 coordination with other agencies both on a rural and urban basis ▪ Collocated dispatch capabilities for incident management, Treasure Valley and Statewide ▪ Enhanced operations capabilities, including monitoring and control of ITD ITS equipment ▪ Potential for sharing or combining resources to support equipment maintenance (District 3 and ACHD) ▪ Expansion of ITD’s ITS program will require additional space and resources for operations ▪ Shared meeting space and IT support ▪ Overall improvement in operational efficiency and incident response times
What does ITD bring to IROC?	
<ul style="list-style-type: none"> ▪ Centralized access to Idaho CARS/511 telephone and web service, road weather information ▪ Proximity to control of statewide Dynamic Message Signs (DMS) and future Highway Advisory Radio (HAR) for information dissemination concerning disasters or AMBER alerts ▪ Incident Response team for Treasure Valley ▪ Access to CCTV statewide (present and future) ▪ Access to adjacent state operations centers (future) ▪ Coordination with statewide services such as HAZMAT monitoring, Port of Entry management, and commercial vehicle operations ▪ Funding prioritization for IROC facility and other regional projects through STIP development process 	

Table 5 – Ada County Highway District Needs/Benefits Chart

Ada County Highway District (ACHD) – The agency provides traffic and incident management assistance to public safety agencies in Ada County and its surroundings. ACHD currently has monitors that scan the regional CCTV and RTMS network for incident detection and owns and operates traffic signals throughout the county. ACHD also operates six dynamic message signs of which four are owned by ITD.

What does ACHD need from IROC?	What does ACHD get from IROC?
<ul style="list-style-type: none"> ▪ Maintain primary access control of ITS devices currently operated and maintained by ACHD and allow specific agencies predefined access control to these devices ▪ WebEOC between all agencies for real-time information sharing ▪ Adequate space for conference rooms either shared or assigned to agencies and also for public meetings close to front of facility that would not require the high levels of security the rest of the building will require ▪ Need tangible benefit/cost ratios before decision can be made to collocate, growing at a rapid rate ▪ Coordination with ITD as freeways are impacting arterials more, future planning on projects that go through ITD ▪ More space in equipment rooms ▪ Enhanced incident management coordination 	<ul style="list-style-type: none"> ▪ Sharing of information will allow for better planning and operations of traffic devices in the region ▪ Sharing of traffic signal technicians and maintenance staff with ITD ▪ Potential to share resources for IT support ▪ Closer coordination with and proximity to State EMS dispatchers and ITD – will improve coordination for freeway incident management ▪ Improved traffic flow on arterials due to coordinated incident response and faster incident clearance times. ▪ Software interface between CAD and ATMS software
What does ACHD bring to IROC?	
<ul style="list-style-type: none"> ▪ ACHD operates 56 CCTV cameras, 370 traffic signals, RTMS throughout the county and 6 dynamic message signs - sharing of those resources would benefit other agencies also involved in the IROC ▪ ACHD owns/operates/maintains numerous ITS devices throughout the county that would be useful to increase efficiency and service to customers of other agencies collocating ▪ Arterial and freeway management devices that would support transit, emergency response and public safety agencies ▪ ACHD is a key operations partner in the region, and has responsibility for operating and monitoring ITD ITS equipment ▪ ITS and electronics specialists could move to facility to maintain the western half of the county if IROC location is in Meridian 	



- Outstanding ACHD Issues:*
- *How would the building, the staff, and the procedures be monitored and controlled?*
 - *What happens to our existing facility when/if ACHD collocates?*
 - *What roles would change, if any, with a new TMC in incident management signal coordination and other operations?*

Table 6 – Valley Regional Transit Needs/Benefits Chart

Valley Regional Transit (VRT) – This agency owns and operates the public transit system in Boise/Garden City and contracts for transit services for Nampa/Caldwell and between Ada and Canyon counties operated under the name ValleyRide.

What does VRT need from IROC?	What does VRT get from IROC?
<ul style="list-style-type: none"> ▪ Centralizing dispatch for VRT, Ada County Dial-a-Ride, and Customer Service/Regional Staff ▪ Geographically-neutral location such as Meridian ▪ Implement transit ITS technologies on a statewide level 	<ul style="list-style-type: none"> ▪ Better coordinate transit services with other transportation management and incident management services through proximity to other agencies and communications links ▪ Shared view of CCTV cameras would benefit transit by real-time re-routing of transit vehicles, incident mayday alarm video response, and evacuation management coordination ▪ Common resource sharing such as IT support ▪ Cost savings by centralizing and consolidating two dispatch centers and three separate dispatch locations
What does VRT bring to IROC?	
<ul style="list-style-type: none"> ▪ Key transportation partner to support emergency evacuation (localized and regional) ▪ Future AVL data – arterial travel conditions/congestion information ▪ Fleet covers key routes in the region; can provide ‘in the field’ reports of current conditions such as congestion, incidents, and planned event route travel conditions ▪ Multimodal presence will increase regional focus and priority on mode options ▪ Coordination for regional traveler information ▪ 	

Outstanding VRT Issues:

- *Are there going to be any ITD statewide transit services provided to VRT as well as other transit agencies around the state?*
- *Will the combining of multiple agency resources into one facility diminish the individual attention given to customer service of each agency?*



Table 7 – State EMS Communications Center Needs/Benefits Chart

State EMS Communications Center (State EMS) – A component of the Idaho EMS Bureau, the Idaho State EMS Communications Center (State EMS) is a 24/7 communications center and the primary EMS dispatch for 22 communities in Idaho. In addition to EMS dispatching, State EMS dispatches the ITD 24/7 and is the point of contact for Hazardous Materials Incidents and Public Health threats for the entire state of Idaho including those at the local district health level. The Communications Specialists flight follows aircraft for Department of Fish and Game and dispatch and provides flight following to Air Medical helicopters.

The Communication Specialists are certified Emergency Medical Dispatchers providing first aid and pre-arrival instructions to callers requesting an ambulance and relay medical control information from responders to physicians. They work closely with the Bureau of Homeland Security, State Public Health, District Health Departments, Fish and Game, Air Medical agencies, law enforcement, fire departments and other state, local and government agencies in response to public and government agencies.



What does State EMS need from IROC?	What does State EMS get from IROC?
<ul style="list-style-type: none"> ▪ Expansion is necessary as they are unable to expand in their current location at ISP ▪ Collective IT management at new facility. While every agency should have their own IT support at least one IT support person should be available for immediate response 24/7, servicing the entire center. ▪ Unity in system configuration among the various state systems ▪ All collocated agencies should maintain control over the staff they assign to the facility ▪ Adequate space for media, conference rooms, administrative personnel, training, storage and EOC. This space must be accessible 24/7 and accommodate multiple agencies needs 	<ul style="list-style-type: none"> ▪ Collocation would enhance DMS operations statewide for Public Health incidents, disasters and AMBER Alerts ▪ Collocation should allow the effective use of ITD's ITS resources for the benefit of patients and ambulances (especially from the scene to the hospital) ▪ Shared video wall control will enhance State EMS abilities to deploy EMS and ITD resources and manage Public Health incidents ▪ Closer coordination with ACHD, transit, and other key partners for day-to-day and emergency situations ▪ Ability to transmit information about roadway compromise/closures to EMS agencies and hospitals
What does State EMS bring to IROC?	
<ul style="list-style-type: none"> ▪ State EMS is a key partner with ITD for incident management and 24/7 dispatch. State EMS already has good working relationships with ITD and ACHD. ▪ Owns a 96 port conference call bridge used to brief HAZMAT incidents with multiple agencies, which could be available for other multi-agency uses. ▪ Funding for State EMS comes from a variety of sources including HRSA, CDC, Motor vehicle registration, and driver license fees, etc. ▪ 24/7/365 dispatch and communications capabilities statewide. ▪ Link to National Weather Service and links to local traffic operations and public safety agencies to disseminate weather information. ▪ Emergency Alert System Activation Center statewide. 	

Outstanding State EMS Issues: - State EMS cannot be viewed solely as an ITD dispatch center; ensure integrity of State EMS identity is maintained in the new facility.

- Need to address audio recording system archiving and access by individual agency or as a whole.



Table 8 – Ada County Emergency Services Needs/Benefits Chart

Ada County Emergency Services (ACES) – This agency is collocated with Ada County 911 Dispatch and is under the control of the Emergency Management Executive Council (EMEC). The Public Safety Communications Section dispatches for local law enforcement, local fire departments, Ada County paramedics, Bureau of Land Management, National Interagency Fire Center, and the National Forest Service.

What does ACES need from IROC?	What does ACES get from IROC?
<ul style="list-style-type: none"> ▪ Remain collocated with Ada County 911 Dispatch ▪ Remain collocated with Ada County Sheriff ▪ Need more comfortable work environment, not in basement ▪ EOC needs to be 24/7 operational ▪ Planning and training exercises should be facilitated in the new facility 	<ul style="list-style-type: none"> ▪ Become more involved in incidents that extend beyond Ada County such as dam failure, nuclear attack, flash flood, and wild land fires ▪ Potentially if economies of scale are realized through collocation ▪ Better coordination with other Ada County agencies ▪ ACES could serve as conduit from state to locals with funding ▪ Shared view of CCTV video images ▪ Larger EOC facility with state-of-the-art communications and video system
What does ACES bring to IROC?	
<ul style="list-style-type: none"> ▪ Existing collaboration with Ada County Sheriff and Local Public Safety Dispatch agencies ▪ EOC capabilities that is linked to other agencies would benefit from proximity and communications link to statewide services such as ISP, State EMS, ITD 	

Table 9 – COMPASS Needs/Benefits Chart

COMPASS – The Community Planning Association of Southwest Idaho is the metropolitan planning organization for northern Ada County and Canyon County. COMPASS is an association of local governments working together to support the regional transportation planning. The Board of Directors for this agency is responsible for setting priorities for spending federal transportation funds that come to the Treasure Valley. They also represent the public interest in deciding how to distribute these transportation investments.

What does COMPASS need from IROC?	What does COMPASS get from IROC?
<ul style="list-style-type: none"> ▪ Significant collocation of local government agencies (e.g. Ada County Dispatch and ACHD TMC) ▪ Lease ending in short term, option to purchase land/building for dedicated facility or move into IROC facility ▪ A centrally located facility (e.g. in Meridian) ▪ Sufficient meeting space for Executive Committee, Board, and various public meetings/workshops ▪ Site security that does not make it difficult for public meetings ▪ Dedicated space in the facility to allow for future expansion of COMPASS staff and functions 	<ul style="list-style-type: none"> ▪ Coordination with collocated and linked agencies ▪ Observation and importance for funding prioritization in the Treasure Valley and how that funding can be used to support IROC functions ▪ Easier access to congestion and performance measurement information from collocated agencies ▪ Integration of COMPASS model and IDAS software ▪ Better access to operations data ▪ Facilitation with meeting the operations requirements placed on MPO's as part of SAFETEA-LU ▪ Ability to act as a single regional point of contact for a wider variety of transportation issues
What does COMPASS bring to IROC?	
<ul style="list-style-type: none"> ▪ Key to regional funding prioritization ▪ Uses IROC as a showcase for effective management of resources and funding for the Treasure Valley decision makers and COMPASS Board ▪ Travel demand forecasting expertise to aid in the development of ITS/operations justification tools/analyses ▪ Vehicle though which the benefits of regional operations can be displayed and advertised to local governments/jurisdictions not part of IROC. Vehicle through which IROC can reach out to other counties in the region (Gem, Payette, Elmore) 	

Outstanding COMPASS Issues: - What kind of assurances would they have that their space would not be compromised by growth of other collocated agencies?



Table 10 – Idaho State Police Needs/Benefits Chart

Idaho State Police (ISP) – The primary mission of the Idaho State Police is to uphold the constitutions of the United States and Idaho, enforce the laws, detect and apprehend violators, and provide effective criminal justice information, communication and identification services. ISP troopers respond to and investigate/analyze vehicular crashes, crimes, incidents, natural disasters, and potential safety hazards on and off Idaho’s roadways and partner with other public safety departments throughout the state. ISP detectives investigate crimes against persons, narcotics violations, racketeering and fraud crimes and alcohol beverage control violations and assist local law enforcement agencies in investigations when requested. The ISP maintains the state’s forensic laboratory system that analyzes evidence submitted from crime scenes by all Idaho agencies, and maintains a number of critical criminal justice databases as well as connectivity with national information databases.

What does ISP need from IROC?	What does ISP get from IROC?
<ul style="list-style-type: none"> ▪ Security is a high priority concern ▪ Maintain access to the ACHD/TMC CCTV system ▪ Cost of collocation must be supported by benefits ▪ Centralized EOC within facility that encompasses the needs of all agencies and is accessible and operable by all agencies ▪ Collocate or provide communication links to external agencies such as Red Cross, USGS, National Weather Service, National Forest Service, public works and public schools in the IROC facility for more collaborative response in major natural or manmade disasters ▪ A united public safety agencies platform for day-to-day use and in the event of major incidents 	<ul style="list-style-type: none"> ▪ Improved access to media ▪ Access to CCTV video images of freeway as well as arterial cameras throughout the Treasure Valley ▪ Possible funding assistance through approval by Idaho State legislation (ISP currently pursues Homeland Security and Justice Assistance Grants) ▪ Moving to new facility could free up additional space for ISP in the current facility ▪ Stronger relationships between ISP and collocated public safety agencies
What does ISP bring to IROC?	
<ul style="list-style-type: none"> ▪ A proven model of success with collocation of ISP, EMS, ACHD and ACSO communications backup system since 1999 ▪ A partnership philosophy of cooperation and collaboration ▪ ISP dispatch for western and central Idaho ▪ ILETS and NLETS access to state and national public safety databases ▪ Links to Bureau of Homeland Security, USGS, National Forest Service and other federal emergency management and response agencies also linked to ACES 	

Outstanding ISP Issues: - Needs of State EMS, Idaho Bureau of Homeland Security and Ada County Sheriff must continue to be met to their satisfaction because of strong ties to ISP?



Table 11 – Ada County Sheriff Needs/Benefits Chart

Ada County Sheriff – The responsibilities include being the public safety dispatch center for every local law enforcement, fire and emergency medical service in Ada County, the police department for the cities of Eagle, Kuna and Star, and the lead agency for the Ada Metro Narcotics Task Force and Ada Metro SWAT Team among others.

What does Ada County Sheriff need from IROC?	What does Ada County Sheriff get from IROC?
<ul style="list-style-type: none"> ▪ All security agency facilities should have at least metal detectors and badges for identification, security is primary concern, exterior building security as well ▪ Reduced DMV line at current facility - wait time is an ongoing issue ▪ Need existing operational space in the new facility as well as expansion space ▪ Plans to expand Ada County Sheriff facility in 2010 to 2012 	<ul style="list-style-type: none"> ▪ Better customer service by dispatching all emergency services in Ada County from one location ▪ Expanded EOC facility ▪ Use of the CCTV video images for arterial traffic incidents and police investigations ▪ Interface between police CAD and ATMS software systems ▪ Interface between ISP and Ada County CAD systems
What does Ada County Sheriff bring to IROC?	
<ul style="list-style-type: none"> ▪ Involvement in IROC would encourage local agencies to be involved in IROC and would benefit all local public safety dispatch services by centralizing dispatch in Ada County for local, regional, and statewide all in one facility ▪ Communications link supports dispatching for all police and fire agencies in Ada County Liaison between state, regional, and local public safety dispatch ▪ Closer coordination with arterial and freeway operations primarily ACHD 	

Outstanding Ada County Sheriff Issues: - Needs more definite roles and responsibilities to consider



Table 12 – Local Public Safety Dispatch Needs/Benefits Chart

Local Public Safety Dispatch (Local PSD) – These agencies include local public safety departments from such cities as Boise, Nampa, Caldwell, and Meridian in the Treasure Valley. Dispatch serves as both a Public Safety Answering Point (PSAP) for dispatching police as well as fire rescue. These agencies have not expressed an interest in collocating as part of IROC, but see tremendous benefit to linking to the IROC facility through a dedicated communications connection.

What do Local PSD need from IROC?	What do Local PSD get from IROC?
<ul style="list-style-type: none"> ▪ Location of IROC facility needs to be accessible and centralized to all public safety dispatch in order to be successful ▪ Local public safety agencies currently have good working relationships with ACHD TMC, and ISP, must maintain that quality of relationship in order to be beneficial ▪ Agencies interested in linking to IROC, not to collocate their facilities 	<ul style="list-style-type: none"> ▪ I-84 CCTV views would be very beneficial for incident response ▪ Relationships with ACHD TMC, and Ada County Sheriff could strengthen through collocation and sharing of resources ▪ If Ada County Sheriff collocates, local public safety dispatch will benefit by shared resources of regional and statewide public safety services ▪ IROC would serve as a centralized point of contact for road conditions, weather, and incident information impacting the region’s transportation system.
What do Local PSD bring to IROC?	
<ul style="list-style-type: none"> ▪ Police and fire rescue dispatch for the other cities and counties in the Treasure Valley outside of Ada County ▪ Strong coordination between cities in term of dispatch services 	

Table 13 – Local Traffic Operation Centers Needs/Benefits Chart

Local Traffic Operations (Local TOCs) – These agencies include the traffic operation centers or workstations that control the local advanced traffic control systems including traffic detection, control, and surveillance and signal systems. These agencies include traffic operation centers from such cities as Boise, Nampa, Caldwell, and Meridian in the Treasure Valley.

What do Local TOCs need from IROC?	What do Local TOCs get from IROC?
<ul style="list-style-type: none"> ▪ Maintain primary access control of ITS devices currently operated and maintained by local traffic operations centers such as City of Nampa, City of Caldwell and Canyon County ▪ WebEOC between all agencies for real-time information sharing 	<ul style="list-style-type: none"> ▪ WebEOC capabilities at new center will enhance customer service by allowing faster information transfers between agencies ▪ Sharing of local traffic operations resources with other agencies such as ACHD would benefit agencies also involved in the IROC ▪ Sharing of information will allow for better planning and operations of traffic devices in the cities ▪ Regional coordination of operation on local facilities that cross jurisdictions (i.e. Ustick Rd, Franklin Rd, Cherry Lane/Fairview Ave, Victory Rd, Amity Rd)
What do Local TOCs bring to IROC?	
<ul style="list-style-type: none"> ▪ Local traffic operations centers operates and maintains numerous traffic signals and associated ITS devices such as preemption signals that would be useful to increase efficiency and service to customers of other agencies collocating ▪ Ability to improve travel conditions on local, regional facilities 	

Table 14 – Media Needs/Benefits Chart

Media – These organizations provide much needed awareness to the public about the local and statewide transportation network system. Providing real-time and planned traveler information to the public such as AMBER alerts, construction projects, road closures, weather reports, and incidents is important for planning daily travel.

What does Media need from IROC?	What does Media get from IROC?
<ul style="list-style-type: none"> ▪ Outdoor staging area for vehicle with cable patch panel for easy access ▪ Inside space for broadcasting/studio ▪ Defined guidelines as to access to CCTV video images, public meeting/media room coverage, press conference schedules, security of IROC facility, etc. 	<ul style="list-style-type: none"> ▪ Easier coverage of more regional news because of collocated facility ▪ Opportunities to become more involved in press conferences, incident reporting, and day-to-day operations of the Treasure Valley
What does Media bring to IROC?	
<ul style="list-style-type: none"> ▪ Traveler information dissemination made easier through direct access to the IROC ▪ Key partner for providing real-time information to traveling public (TV and radio broadcasts), particularly during incidents, peak travel times, and major planned events 	

Outstanding Media Issues: - How much access will be given to the media in the new facility without compromising security?

7. JUSTIFICATION ANALYSIS FOR IROC CONCEPT

Through the outcomes of the scanning tour and through one-on-one discussion at the early ConOps stages, there are substantial justification points to a collocated, multi-agency operations center.

- A state-of-the-art facility to meet the growing demands of the Treasure Valley Area. As the population continues to grow and expand geographically, it will be necessary to expand current agency facilities to meet the demands of more staff, more equipment and broadened responsibilities. By planning with this growth in mind, IROC can be a facility that can help meet that demand.
- Enhancing ITD's operational role for freeway and incident management. Ada County and State EMS have key dispatch and operational responsibilities for ITD equipment in the Boise area, due to ITD not having sufficient operations space at their current HQ facility. IROC could provide for a facility that will allow ITD to take a stronger operations role, and will provide for a centralized facility that can connect to and support planned ITD ITS expansion throughout the state.
- Better coordination for incident management among ACHD, ITD, State EMS and public safety. At present, incident management communications are facilitated manually. Although these agencies have excellent working relationships, combining these functions into one facility will greatly improve incident management coordination and response.
- Coordinating and combining resources for equipment maintenance could greatly benefit ITD and ACHD. There is the potential to establish a coordinated maintenance program so that both agencies will benefit from combined maintenance resources. As the region grows and as equipment maintenance needs grow, so do the resource requirements.
- Consolidating transit operations. Transit is currently in multiple dispatch and operations locations. A centralized facility could provide for cost savings by consolidating equipment and resources. Transit will also benefit from close proximity to freeway and traffic operations capabilities.
- Streamlining equipment resources and requirements will be a benefit to all agencies involved. Presently, ACHD and State EMS operate and maintain separate video walls in their respective facilities. Having these resources in one center with a shared video wall could reduce the ongoing maintenance for duplicate facilities. The same concept could be applied to ITD equipment and servers – with ACHD and State EMS having ITD workstations and operational responsibilities, there are separate equipment set-ups in those facilities. Having one location from which all of the monitoring and control equipment can be operated and maintained will reduce operating costs for all agencies involved.

These justifications represent an initial list of benefits and warrants – at this time, moving forward with agency discussions about collocation in a centralized IROC facility are warranted and justified. There are benefits to all agencies at a minimum communicating with the IROC and much benefit for some agencies to collocate in the facility. Each agency will determine, through the Concept of Operations process and in looking at their potential role in IROC, whether collocating in the IROC could be a feasible solution to address cost savings and enhancements to customer service. There are additional needs and issues that will be addressed in more detail through the operational concept development described in the next section.



8. CONCEPT OF OPERATIONS OVERVIEW

Developing an operational concept and requirements for this facility is the next step in the Phase II process and will require active participation from transportation management, public safety, transit, maintenance, information technology and facilities management.

The operational concept will document the roles and responsibilities across the range of transportation and emergency services of agencies that will be collocating in the facility and communicating through direct links to the facility. Identifying various operational scenarios, including the relationships among agencies involved in a particular service or function and additional entities that might play a secondary role or benefit from the outputs of a service or function, will provide a snapshot view of the operations and impacts of IROC on the Treasure Valley and the state.

Bringing the key partners and stakeholders to the table to discuss critical path issues and develop a set of 'must have' criteria from a range of perspectives will guide the development of the operational concept. Stakeholder involvement in workshops is key to the development of the operational concept as it is beneficial to identify information sharing requirements and logistics of multi-agency response and coordination in order to meet the needs of each agency involved.