

# **Phase II – Individual Tracking and Costs**

**Examination of the Costs of Homelessness and Issues Related to Determining the Cost-Effectiveness of Supportive Services and Housing in Washoe County, NV**

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**Prepared for:**

Washoe County

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# Executive Summary

Phase II of the study, “Examining the Cost-Effectiveness of Permanent Supportive Housing in Washoe County, Nevada”, is described in the scope of work as follows: *“Estimate costs associated with each of the four principal sub-populations listed above by tracking individuals through various ‘systems’ and complete the cost-effectiveness related to housing and support systems for the chronic homeless.”* The four principal sub-populations were: 1) individuals with mental illness, 2) individuals who are chronic inebriates/substance abusers, 3) individuals with co-occurring disorders, and 4) families who are persistently homeless.

The detailed description of the scope of work sets forth the cost categories to be examined to include: a) medical, b) mental health, c) first responder, d) judicial, and e) detention facility. Further, the detailed scope of work calls for examination of housing, broken down by emergency, transitional and permanent supportive housing, along with examination of housing projects owned and operated by various public and private housing providers such as the Washoe HOME Consortium, the Reno Housing Alliance and the US Federal Department of Housing and Urban Development (HUD) as well as an examination, by sub-population, of various private housing such as weekly rental motels, private apartments and owner-occupied housing units. The scope of work continues with additional descriptions of the detailed analyses to be completed relative to permanent supportive housing, analysis of alternative strategies, recommendations regarding resource allocations, opportunities to leverage existing and new resources and calls for a Phase II report to set forth how all this was accomplished and the results.

The research team assigned to this study on behalf of the University of Nevada, Reno consists primarily of economists with the exception of Dr. Ann Hubbert, professor in the Orvis School of Nursing, who was the primary researcher for Phase III (case studies) and who provided some special insight to the team in regards to the medical and mental health section, as well as her extensive background in working with the homeless in the Reno-Sparks-Washoe County area and in other communities, including Omaha, Nebraska. One aspect of the team that was both an

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advantage and a disadvantage was that, except for Dr. Hubbert, the team members had no extensive background with homeless-related issues. The research team had no preconceived notions or working knowledge of the population in the Reno-Sparks-Washoe County area, of the system of service providers, of the data available or of the individual service providers related to their provision of homeless-related services. It also meant that the research team had a very steep learning curve, and were very dependent upon those entities and key individuals involved in the system of homeless services for access to the data, insight into how to look at the data and review of the initial attempts to understand and analyze the data. The research team has great appreciation for the cooperation and assistance that was provided from these entities, organizations, agencies and key individuals.

Perhaps the most interesting and revealing of all this study's findings was that most of the detailed scope of work set forth for Phase II simply could not be done due to the large unavailability of data or the lack of precision and accuracy in existing datasets. A litany of the data problems includes the following:

- Definitions of homelessness various from one provider (and database) to another.
- There was no designation of homelessness in existing databases.
- Detailed breakdown by sub-category and sub-population did not exist in almost all cases.
- Cost data on either an aggregate or per individual case did not exist in some cases.
- Cost data attributable to certain supportive services included direct variable costs in almost all cases.
- No information was available related to marginal or incremental costs associated with providing services to individuals, nor was the information available to make such determinations.
- Data by individual would not (could not) be provided by several key service providers due to individual privacy requirements driven by HIPAA or other regulations and/or internal policies.

In spite of these limitations, there was substantial data available to the research team, there were some operational definitions of homelessness that were developed cooperatively by the research team and various service providers, there were indirect ways of capturing some of the data and there were a number of "work-arounds" used to capture information and generate

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generalized conclusions and observations based upon individual identifiers without violating privacy requirements.

The most revealing general observation derived from data provided by the Reno Police Department, Washoe County Sheriff's Office, St. Mary's Regional Medical Center and Renown (formerly Washoe Medical Center) Regional Medical Center was that the demand placed upon these four providers of different types of supportive services by an *identified* persistently homeless population is very small relative to their overall client base. Relative to all "consumers" of services provided by the Reno Police Department, Washoe County Sheriff's Office, St. Mary's Regional Medical Center and Renown Regional Medical Center those individuals who fit their own operational definition of "homeless" accounts for a small minority of their total consumers (contacts, inmates or patients). In the case of the two principal medical providers – St. Mary's and Renown Regional Medical Center – individuals identified as homeless does not appear to be creating a substantial strain on existing medical services capacity.

Additionally, the number of persistently homeless individuals serviced by either St. Mary's or Renown Regional Medical Center has remained relatively constant over the past several years. However, in the case of the Reno Police Department and the Washoe County Sheriff's Office, the identified persistently homeless population is not only beginning to place measured strain on each individual organizations capacity level but appears to be increasing over the past several years. Although the Washoe County Sheriff's Office was able to provide individually identified data for inmates booked at the Washoe County Sheriff's Office (WCSO) Detention Facility, no judicial individually identified data was available for study from the courts. The use of WCSO Detention Facility data provides a fairly good estimate of the number of individuals creating demand on various judicial services. However, the extent of the demand for each individual booked at the WCSO Detention Facility upon the court system could not be estimated from this data source since each individual will have unique case requirements before any of the "courts" in the Reno-Sparks-Washoe County area.

The second main observation is that a small minority of the identified persistently homeless in the four service providers profiled in this report – the Reno Police Department, the Washoe County Sheriff's Office, St. Mary's Regional Medical Center and Renown Regional Medical Center – seem to consume a large portion of all services provided just to the homeless population. For example, in the case of Washoe County Sheriff Office total bookings between 2002 and December, 2006, the mean or average number of total bookings over the entire 2002 and December, 2006 by individuals identified as persistently homeless in the Reno-Sparks-Washoe County area was seven total bookings. 14 of the 50 most "frequently" booked persistently homeless individuals at the Washoe County Detention Facility had total bookings over the same 2002 to December, 2006 period in *excess*



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of seven total bookings while the remaining 36 most “frequently” booked persistently homeless individuals had total booking over the same 2002 to December 2006 period *below* the mean of seven total bookings.

The third main observation has to do with the distribution of medical services consumed by the “frequent flyer” persistently homeless population in the Reno-Sparks-Washoe County area. For example, the three individuals identified as both inpatient “homeless” patients by St. Mary’s and participants of the Reno Police Department’s COMP averaged a total of 2.67 visits per year, staying, on average, 16.17 days and consuming on average, \$70,831.85 in total inpatient services per year. Between 2002 and 2005, the three years of complete annual data, 41 individuals averaged a total of 140 separate outpatient visits per year, staying, on average, 9.28 days per visit and consuming on average, \$196,995.87 in total outpatient services per year. The four individuals identified as both outpatient “homeless” patients by St. Mary’s and participants of the Reno Police Department’s COMP averaged a total of 46.67 visits per year, staying, on average, 10.00 days and consuming on average, \$45,120.33 in total outpatient (or emergency room) services per year.

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# Individual Cost Tracking

## *Introduction*

Phase I of this study involved the indirect measure of various costs and demand for various supportive services generated by the persistently homeless and/or “at-risk” population currently in the Reno-Sparks-Washoe County area. For example, various client data, i.e. number of housing vouchers provided or number of detoxification services performed or number of homeless related cases filed in a particular court, was used to identify whether or not the demand for various types of supportive services in the Reno-Sparks-Washoe County area has increased or decreased over the past several years due to an increase or decrease in the total number of persistently homeless and/or “at-risk” individuals in the Reno-Sparks-Washoe County area or due to an increase or decrease in their respective levels of demand for various types of supportive services.

Phase II of this study, “Examining the Cost-Effectiveness of Permanent Supportive Housing in Washoe County, Nevada”, provides a more direct estimate of demand for some form of permanent supportive housing for the persistently homeless population in the Reno-Sparks-Washoe County area by examining the “service consumption behavior” of individuals in the Reno-Sparks-Washoe County area that are persistently homeless.

Although there were few resources available that actually allowed specific examination of an individual’s service consumption behavior, a few datasets, principally ones provided by the Reno Police Department, the Washoe County Sheriff’s Office, St. Mary’s Regional Medical Center and Renown Regional Medical Center were available that did provide some insight into the distribution of an individual’s service consumption behavior.

Section one of this report examines data provided by the Reno Police Department. Section two examines data provided by the Washoe County Sheriff’s Office. Section three examines data provided by St. Mary’s Regional Medical Center and section four examines data provided by Renown Regional Medical Center. Section five provides a brief cross-comparison between all four service providers profiled in this report as well as general and overall observations and conclusions.

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## ***Reno Police Department, City of Reno***

Work on Phase II of this study started with the Reno Police Department's Chronic Offender Mapping Program (COMP). COMP was designed as a response to continued interaction between police officers of the City of Reno Police Department's Downtown Enforcement Team (DET) and individuals who had been routinely cited, arrested or taken into Civil Protective Custody (CPC).

These subjects, who generally range between 15 and 30 individuals per year, are generally known on a "first name basis" with law enforcement and represent the "frequent flyers" of the persistently homeless population in the downtown City of Reno urban core. It made sense to start with the City of Reno Police Department largely due to the high concentration of persistently homeless individuals that live throughout the downtown Reno urban core as seen in the various working papers presented in Phase I of this study.

A detailed two-page summary of the Chronic Offender Mapping Program was provided to the members of the University of Nevada, Reno's research team assembled to compile this study by officers of the Reno Police Department. This section summarizes the COMP.

### **Summary of the Chronic Offender Mapping Program**

Four points summarize the COMP. They include:

1. The Chronic Offender Mapping Program, (COMP) was envisioned during meeting of the downtown task force.
2. The program was implemented to create a safe, friendly environment in the Downtown, Riverfront and Downtown Parks Districts for the citizens of the City of Reno and the visitors to our city.
3. By creating this atmosphere for our citizens, it reflects a positive image to visitors of our city and encourages them to return.
4. When citizens were contacted, they all had the same complaints:
  - There is an increase in beggars and vagrants.
  - Drunks are on every corner.
  - And in the summer our parks look like Civil War battle grounds.

The Chronic Offender Mapping Program clearly had been developed as part of an overall approach to revitalization and redevelopment efforts throughout the City of Reno's downtown urban core. The COMP was a response to citizen and business owner concern that the downtown Reno urban core had become a center for persistently homeless activity.

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In addition to the development of the COMP, other programs and services, such as the Crisis Intervention Team and the Motel Interdiction Team, both part of the Reno Police Department, and the Homeless Evaluation Liaison Program, a joint Reno Police Department – Washoe County Sheriff’s Office program, were designed to proactively engage a persistently homeless population, principally in the downtown Reno urban core. Up to this point, it had become clear that the “traditional” approach had generally failed and a new approach to linking individuals who are persistently homeless with various supportive services was needed in the City of Reno’s downtown urban core.

## **Background of the Chronic Offender Mapping Program**

Four points summarize the background of the COMP. They include:

1. The members of the Downtown Bicycle Enforcement Team can contribute chronic problems to a select number of individuals. These subjects numbering between 15 and 30 (depending on time of year) are our downtown regulars and are known on a first name basis. They are routinely cited, arrested or taken into Civil Protective Custody (CPC).
2. The implementation of this alternative sentencing program benefits the citizens of Reno and the visitors who enjoy the immense opportunities the area offers.
3. This benefits the offenders by removing them from the circle (in which) they live.
4. The program offers the candidate the opportunity of redemption and removal from the program.

The COMP has the unique aspect of being proactive in its approach to handling chronic offenders who are persistently homeless yet choose to live in and around the downtown Reno urban core.

It is responsive to the growing concern that a continued persistently homeless presence in the downtown Reno urban core has numerous negative externalities that are not only problematic for those that are persistently homeless but for area businesses, residents and visitors of the Reno-Sparks-Washoe County area. The COMP is the first step in linking individuals in need of supportive services to those supportive services that can make the most difference.

## **Candidate Criteria for the Enforcement Program**

There are three sets of criteria related to the Chronic Offender Mapping Program. The first is the criteria for the Enforcement Program. Two general criteria exist. They are:

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1. The subject must have been arrested or given a misdemeanor citation for a total of three (3) times during a six (6) month period while in the mapped area for the following violations:
    - Any felony offenses.
    - Misdemeanor offenses.
    - Warrants.
    - Traffic offenses which pertain to pedestrians.
  2. The number of time(s) the subject had been contacted by (Reno) Police as documented by field interview cards, will also be an additional factor.

### **Candidates on the Chronic Offender Mapping Program**

The second is the criteria or “next steps” participants or registered COMP subjects take when they become eligible and part of the Chronic Offender Mapping Program. Five general criteria or “next steps” exist. They are:

1. Once the candidate is placed on the program he/she is placed onto Tiburon listing them as a current Chronic Offender Candidate (C.O.C.).
2. COMP candidates do not qualify for citations and are listed as arrest only. Candidates all have a history of Failure to Appear, Obeys, etc., and a pattern showing citations do not deter their actions.
3. A City of Reno Municipal Judge may give a candidate alternative sentencing in conjunction with a suspended sentence after the candidate voluntarily accepts the program.
4. Once the candidate is placed on the Chronic Offender Mapping Program, they are recorded into Tiburon, listing any exceptions and boundaries for the COC and if the COC is in violation to arrest using a remand order.
5. A monthly audit is conducted on the offenders. Officers coming in contact with potential candidates will e-mail the subjects details and the subject will be placed on the monthly audit list.

The five “next steps” listed here after an individual subject has become a Chronic Offender Candidate and is placed into the Chronic Offender Mapping Program illustrate the proactive and realistic approach taken to providing the types of supportive services this particular persistently homeless population requires. Acknowledging that citations generally result in “Failure to Appear” and other related charges, the Reno Police Department has taken a more proactive approach with persistently homeless chronic offenders.

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The “direct to arrest” approach is not designed to be punitive, but rather designed to be proactive in removing an individual from a lifestyle that is not only undesirable from the larger community’s view, but from the standpoint of the persistently homeless, chronic offender as well. Given the high frequency of Drunk (DRUNK), Mental Subject (MENTAL), Unwanted Subject (UNWANT) and Person Down (ONEDWN) calls for 911 Reno Police Department calls for service in the downtown Reno urban core, identified in the First Responder working paper of Phase I of this study, the overwhelming majority, if not all, Chronic Offender Candidates are in a physical and mental state that does not allow the individual to make rational, well-informed choices that are best for their individual physical and mental health.

### **Candidate Criteria for Removal from the Chronic Offender Mapping Program**

The third and final set of criteria is the criteria for removal from the COMP. The removal criterion has two general criteria. They are:

1. Once the subject has been identified as a candidate for the mapping program he/she has to reflect the following positive actions to be removed:
  - Must not receive a misdemeanor citation or been arrested for the above listed offenses for a period of three (3) months.
  - Must not be taken into custody for CPC for a period of three (3) months.
  - Must not be a participant in a documented field interview for a period of three (3) months.
  - Must not possess an active warrant(s).
2. This period of time the candidate spends in custody, does not count towards the period of not contacted as described above.

### **Results from COMP Data Provided**

The Reno Police Department was able to provide the members of the University of Nevada, Reno research team with a list of 31 individuals who are the most recent participants of the Chronic Offender Mapping Program. The COMP list of Chronic Offender Candidates was used primarily as a “jumping off” point with other service providers profiled in this report.

As mentioned earlier in this study, principally in the First Responder working paper of Phase I, law enforcement and other first responders play an important “first contact” role in linking persistently homeless individuals with various providers of supportive services. Considerable research revealed that many individuals who are persistently homeless generally engage with first responders – law enforcement, fire department officials or

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emergency medical paramedic-EMT's – before receiving services from a supportive service provider.

The data provided by the Reno Police Department from the COMP was the individual's social security number, the individual's first and last name, height, weight, and hair and eye color. This data was provided for the most recent period, ending October 30, 2006. A total of 31 individuals were identified as current participants of the Reno Police Department's Chronic Offender Mapping Program. Table 1-1 presents a breakdown of the total number of individuals participating in the COMP and their state of origin using the first three numbers of their social security number.

**Table 1-1**  
**Jurisdiction of Origin – Reno Police Department COMP**  
**As of October 30, 2006**

State of Origin of SSN	Number of Individuals	Percentage of the Whole
Georgia	1	3.23%
Ohio	1	3.23%
Michigan	1	3.23%
Texas	1	3.23%
Utah	1	3.23%
Nevada	9	29.03%
Washington	3	9.68%
Oregon	2	6.45%
California	10	32.26%
Guam, American Samoa, N Mariana Isl., Philippines	1	3.23%
Unknown	1	3.23%
<b>Total</b>	<b>31</b>	<b>100.00%</b>

One thing that the data presented in Table 1-1 does not show is *how long* each individual has lived in the City of Reno. Using the first three digits of the individual's social security number only identifies the individual's *state of origin (where they resided when they first received a social security number) or in what state the individual was born*. Given this observation, the majority of current COMP participants as of October 30, 2006, were from California. 10 of the 31 total individuals, or 32.26%, had social security numbers that indicated they were from California. The second largest majority, 9 or 29.03% of the total number of COMP participants, were from Nevada.

Washington, with 3 individuals or 9.68%, was the third most common state of origin for individuals currently part of the Reno Police Department's COMP and Oregon, with 2 individuals or 6.45%, was the fourth most common state of origin for individuals currently part of the Reno Police Department's COMP. Although the overwhelming majority of individuals, 77.42%, had states of birth from only four individual states – California, Nevada, Washington and Oregon – there is considerable diversity in the

total number of states where individuals who are part of the Reno Police Department's COMP.

## **Washoe County Sheriff's Office Detention Facility**

Table 1-2 presents a breakdown of the top 100 individuals identified as "no fixed address" by the Washoe County Sheriff's Office and booked/incarcerated at the Washoe County Sheriff's Office Detention Facility over the 2002 to December 5, 2006 period. For comparative purposes, the Detention Facility had 8,375 bookings for individuals with no fixed address over that five year period. These 8,375 bookings were generated by 6,835 individuals, indicating that the average booking per individual with no fixed address during this five year period was 1.23 or approximately one and one-quarter booking per individual over five years.

Table 1-2 shows the booking frequency for the top 100 "frequent flyers" at the Washoe County Detention Facility over a five year (59 month) period.

**Table 1-2  
Total "Frequent Flyer" Bookings of Homeless Individuals – Washoe  
County Sheriff's Office Detention Facility  
2002 – December 5, 2006**

	Number of Inmates	Percent of all Inmates	Number of Bookings Per Inmate	Percent of all Bookings
<b>Top 50 (1-50) Inmates</b>	1	1.00%	56	5.52%
	1	1.00%	39	3.84%
	1	1.00%	33	3.25%
	2	2.00%	18	1.77%
	3	3.00%	17	1.67%
	3	3.00%	16	1.58%
	2	2.00%	15	1.48%
	1	1.00%	14	1.38%
	3	3.00%	13	1.28%
	3	3.00%	12	1.18%
	9	9.00%	11	1.08%
	8	8.00%	10	0.99%
	9	9.00%	9	0.89%
4	4.00%	8	0.79%	
<b>Next 50 (51-100) Inmates</b>	11	11.00%	8	0.79%
	19	19.00%	7	0.69%
	20	20.00%	6	0.59%
<b>Total</b>	<b>100</b>	<b>100.00%</b>	<b>1,015</b>	<b>100.00%</b>

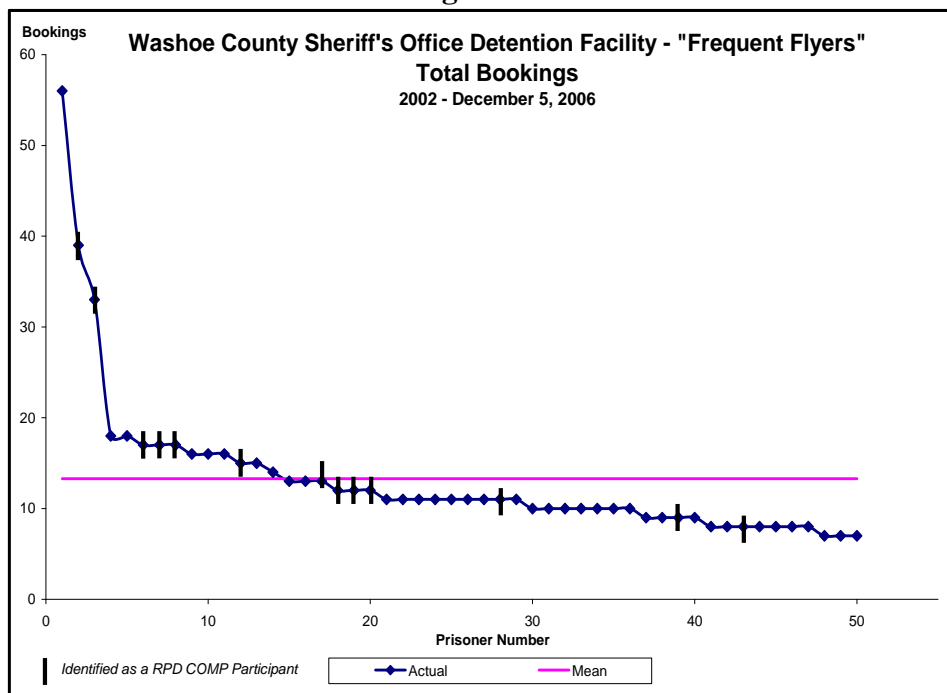
The data presented in Table 1-2 shows that a small minority of the top 100 "frequent flyers" identified by the Washoe County Sheriff's Office as homeless are responsible for a great portion of all total bookings. One individual, or 1.00% of the top 100 individuals, accounted for 56 individual



bookings or 5.52% of all total bookings over the 2002 to December 5, 2006 period. One other individual accounted for 39 or 3.84% of all total bookings and another individual accounted for 33 or 3.25% of all total bookings. Combined, these three identified homeless individuals booked into the Washoe County Sheriff's Office Detention Facility accounted for 128 or 12.61% of all bookings at the Detention Facility of the top 100 identified homeless individuals over the 2002 to December 5, 2006 period.

Figure 1-1 presents total bookings for 50 individuals who were identified by the Washoe County Sheriff's Office as homeless over the 2002 to December 5, 2006 period (59 months). The "Top 50 (1-50) Inmates" shaded above in Table 1-2 serve as the dataset plotted in Figure 1-1. An average or "mean" number of total bookings is also plotted in Figure 1-1 and those that were identified as participants in the City of Reno Police Department's Chronic Offender Mapping Program were also highlighted. It is important to note that Figure 1-1 plots *total bookings* and not the total number of Civil Protective Custody (CPC) incidents. An actual booking is very different from CPC as CPC *does not* require booking an individual into the Washoe County Sheriff's Office (WCSO) Detention Facility.

**Figure 1-1**



Several observations can be made from the data presented in Figure 1-1. First, the "mean" or average number of total bookings for the top 100 individuals over the entire 59 month 2002 to December 5, 2006 period was 13.28 total bookings. Over this 59 month period, 14 individual, out of the 50 total, "frequent WCSO Detention Facility prisoners" identified by the WCSO as indigent or homeless had a total number of bookings greater than

the “mean” plotted in Figure 1-1 while the majority of “frequent WCSO Detention Facility prisoners”, a total 36, had a total number of bookings over the entire 59 month period studied below the “mean” plotted in Figure 1-1. Table 1-3 summarizes this first principal observation.

**Table 1-3  
Detention Facility Prisoner Frequent Flyers – WCSO  
59 Months Total, 2002 – December 5, 2006**

Category	Number of Prisoners	Percent of the Whole	Total Bookings	Percent of the Whole
<b>Above Mean</b>	14	28.00%	307	46.23%
<b>Below Mean</b>	36	72.00%	357	53.77%
<b>WCSO Total</b>	<b>50</b>	<b>100.00%</b>	<b>664</b>	<b>100.00%</b>

14 or 28.00% of all individuals tracked as “frequent WCSO Detention Facility prisoners” who were identified as indigent or homeless and above the “mean” plotted in Figure 1-1 accounted for 46.23% of all total booking of the top 50 indigent or homeless individuals booked at the WCSO Detention Facility. This observation indicates a fairly normal distribution in that a minority of total prisoners identified as homeless or indigent by the WCSO accounted for a minority of the total number of bookings in excess of the “mean” or average number of total bookings recorded by the WCSO over the entire 59 month, 2002 – December 5, 2006 period. A majority of total prisoners identified as homeless or indigent by the WCSO accounted for a majority of the total number of bookings that fell below the “mean” or average number of total bookings recorded by the WCSO over the entire 59 month, 2002 – December 5, 2006 period.

The second major observation made from the data presented in Figure 1-1 is that 14 individuals identified as “frequent WCSO Detention Facility prisoners” who were identified as indigent or homeless were also identified as current participants of the Reno Police Department’s Chronic Offender Mapping Program. Of the 14 individuals who were identified as RPD COMP participants and “frequent WCSO Detention Facility prisoners”, six or 42.86% had total bookings at the WCSO Detention Facility in excess of the “mean” or average number of total bookings plotted in Figure 1-1.

Eight or 57.14% of the 14 homeless individuals common to the RPD Chronic Offender Mapping Program and the WCSO Detention Facility booking records had total bookings over the 59 month, 2002 – December 5, 2006 period that were less than the average or “mean” total number of bookings plotted in Figure 1-1.

Table 1-4 presents some additional summary observations regarding the data presented in Figure 1-1.

**Table 1-4**  
**Detention Facility Prisoner Frequent Flyers – WCSO and RPD COMP**  
**59 Months Total, 2002 – December 5, 2006**

Category	Number of Prisoners	Percent of the Whole	Total Bookings	Percent of the Whole
RPD COMP + WCSO	14	28.00%	215	32.38%
Just WCSO	36	72.00%	449	67.62%
WCSO Total	50	100.00%	664	100.00%

Of the 50 total prisoners identified as “frequent WCSO Detention Facility prisoners” that were identified as either indigent or homeless, 14 or 28.00%, of all WCSO frequent flyers that were common to the dataset examined for the Reno Police Department’s Chronic Offender Mapping Program, accounted for a minority of all total “frequent WCSO Detention Facility prisoner” bookings for only those individuals identified as indigent or homeless by the Washoe County Sheriff’s Office over the entire 59 month, 2002 to December 5, 2006 period.

### ***St. Mary’s Regional Medical Center***

St. Mary’s Regional Medical Center provided a great deal of individual identifier data for a number of individuals identified as persistently homeless. Data was provided on the total number of inpatient visits and number of outpatient visits by individuals identified by St. Mary’s Regional Medical Center as persistently homeless. Each section here presents the findings for St. Mary’s Regional Medical Center’s inpatient and outpatient client services for individuals identified as: 1) persistently homeless or 2) unable to pay for their own medical care. As a note, outpatient services are synonymous with the providing of emergency room services.

Table 1-5 maps the top 25 “inpatient frequent flyers” identified by St. Mary’s Regional Medical Center as persistently homeless or unable to afford their own medical care and their corresponding “inpatient visits” for the 2003 to September 30, 2006 period. Table 1-5 also maps the top 41 “outpatient frequent flyers” identified by St. Mary’s Regional Medical Center as persistently homeless or unable to afford their own medical care and their corresponding “outpatient visits” for the same 2003 to September 30, 2006 period. In the case of St. Mary’s Regional Medical Center, *outpatient* is synonymous with *emergency room* patient. Whenever

outpatient visits are mentioned in this section, the reader should consider them the same as emergency room visits.

**Table 1-5**  
**Inpatient and Outpatient “Frequent Flyers” – St. Mary’s Regional**  
**Medical Center**  
**2003 – September 30, 2006**

	<b>Number of Patients</b>	<b>Percent of all Patients</b>	<b>Number of Visits Per Patient</b>	<b>Percent of all Visits</b>
<b>Top 25 (1-25) Inpatients</b>	1	4.00%	10	16.13%
	2	8.00%	5	8.06%
	2	8.00%	4	6.45%
	4	16.00%	3	4.84%
	6	24.00%	2	3.23%
	10	40.00%	1	1.61%
<b>Total</b>	<b>25</b>	<b>100.00%</b>	<b>62</b>	<b>100.00%</b>
<b>Top 41 (1-41) Outpatients or Emergency Room Visits</b>	1	2.44%	91	14.72%
	1	2.44%	81	13.11%
	1	2.44%	41	6.63%
	1	2.44%	34	5.50%
	1	2.44%	27	4.37%
	1	2.44%	24	3.88%
	2	4.88%	21	3.40%
	1	2.44%	18	2.91%
	2	4.88%	16	2.59%
	4	9.76%	14	2.27%
	2	4.88%	13	2.10%
	1	2.44%	12	1.94%
	2	4.88%	10	1.62%
	4	9.76%	9	1.46%
	3	7.32%	8	1.29%
	4	9.76%	6	0.97%
	1	2.44%	5	0.81%
	3	7.32%	4	0.65%
	3	7.32%	3	0.49%
	1	2.44%	2	0.32%
	2	4.88%	1	0.16%
<b>Total</b>	<b>41</b>	<b>100.00%</b>	<b>618</b>	<b>100.00%</b>

Regarding inpatient visits by individuals identified as persistently homeless or unable to afford their own medical care at St. Mary’s Regional Medical Center, the distribution of “frequent flyers” is immediately obvious. One individual, accounting for 4.00% of all “inpatient frequent flyers” at St. Mary’s accounted for 10 total visits or 16.13% of the total over the entire 2003 to September 30, 2006 period. Whereas 10 individuals, accounting for 40.00% of all “inpatient frequent flyers” at St. Mary’s had only one visit per patient or 1.61% of all total visits between 2003 and September 30, 2006.

A similar distribution is evident in the number of “frequent *outpatient* (emergency room) flyers” at St. Mary’s Regional Medical Center. One individual identified as persistently homeless or unable to afford their own medical care accounted for just 2.44% of all emergency room/outpatient visits at St. Mary’s amongst persistently homeless/unable to pay for service individuals. This one individual accounted for 91 total visits, or 14.72% of total visits, to St. Mary’s emergency room between 2003 and September 30, 2006.

The following sections examine inpatient and outpatient visits at St. Mary’s Regional Medical Center in greater detail.

### **Inpatient Hospital Stays and Treatment – St. Mary’s Regional Medical Center**

25 individual patients who met the definition of persistently homeless or could not afford to pay for their own health care were identified by St. Mary’s Regional Medical Center as the most frequent consumers of inpatient care services at St. Mary’s for 14 quarters between 1<sup>st</sup> Quarter 2003 and 3<sup>rd</sup> Quarter 2006 (omitting 2<sup>nd</sup> Quarter 2006 because it was not available).

Table 1-6 summarizes some general findings for inpatient services for each complete annual year between 2002 and 2005.

**Table 1-6  
Inpatient Services for Frequent Flyers – St. Mary’s  
2002 – 2005**

St. Mary’s Inpatient	Category	2003	2004	2005	Average
All St. Mary’s Identified “Homeless”	Number of Visits	19	14	22	18.33
	ALOS	18.36	25.00	12.15	18.50
	Sum of TOTAL CHARGES	\$359,593.23	\$429,923.24	\$381,547.27	\$390,354.58
All RPD COMP Identified Frequent Flyers	Number of Visits	3	0	5	2.67
	ALOS	35.00	0.00	13.50	16.17
	Sum of TOTAL CHARGES	\$109,555.07	\$0.00	\$102,940.47	\$70,831.85
Percentage of the Whole	Number of Visits	15.79%	0.00%	22.73%	12.84%
	ALOS				
	Sum of TOTAL CHARGES	30.47%	0.00%	26.98%	19.15%

Of the 25 individual patients identified by St. Mary’s Regional Medical Center who received inpatient care services but were also identified as either persistently homeless or could not afford to pay for their own health care, only three individuals or 12.00% were also identified by the Reno Police

Department as participants of the Chronic Offender Mapping Program. Between 2002 and 2005, the three years of complete annual data, the 25 total persistently homeless individuals identified by St. Mary's averaged a total of 18.33 separate visits per year, staying, on average, 18.50 days per visit and consuming on average, \$390,354.58 in total inpatient services per year. The three individuals identified as both inpatient "homeless" patients by St. Mary's and participants of the Reno Police Department's COMP averaged a total of 2.67 visits per year, staying, on average, 16.17 days and consuming on average, \$70,831.85 in total inpatient services per year.

Between 2002 and 2005, the three individuals identified as "inpatient frequent flyers" that are either persistently homeless or unable to afford their own health care by St. Mary's and participants of the Reno Police Department's Chronic Offender Mapping Program, accounted for, on average, 12.84% per year of all homeless or unable to afford their own health care patient visits and 19.15% per year of all total charges.

No individual identifiers were provided for the 25 "inpatient frequent flyers" that are either persistently homeless or unable to afford their own health care identified by St. Mary's that received inpatient care between 2002 and 2005. This made it impossible to determine how many individuals of the emergency room patients (or outpatient) were being admitted for more intense medical inpatient care.

## Outpatient Hospital Treatment – St. Mary's Regional Medical Center

Table 1-7 summarizes some of these findings for outpatient services for each complete annual year between 2002 and 2005.

**Table 1-7  
Outpatient Services for Frequent Flyers – St. Mary's  
2002 – 2005**

St. Mary's Outpatient	Category	2003	2004	2005	Average
All St. Mary's Identified "Homeless"	Number of Visits	102	114	204	140.00
	ALOS	4.28	15.10	8.45	9.28
	Sum of TOTAL CHARGES	\$148,267.41	\$152,885.87	\$289,834.34	\$196,995.87
All RPD Identified Frequent Flyers	Number of Visits	27	25	88	46.67
	ALOS	8.00	7.00	15.00	10.00
	Sum of TOTAL CHARGES	\$24,209.07	\$18,405.81	\$92,746.10	\$45,120.33
Percentage of the Whole	Number of Visits	26.47%	21.93%	43.14%	30.51%
	ALOS				
	Sum of TOTAL CHARGES	16.33%	12.04%	32.00%	20.12%

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41 individual patients who met the same definition as persistently homeless or could not afford to pay for their own health care were identified by St. Mary's Regional Medical Center as the most frequent consumers of outpatient care services at St. Mary's for 15 quarters between 1<sup>st</sup> Quarter 2003 and 3<sup>rd</sup> Quarter 2006. Of the 41 individual patients identified by St. Mary's Regional Medical Center who received outpatient care services but were also identified as either persistently homeless or could not afford to pay for their own health care, only four individuals or 9.76% were also identified by the Reno Police Department as participants of the Chronic Offender Mapping Program.

Between 2002 and 2005, the three years of complete annual data, 41 individuals averaged a total of 140 separate outpatient visits per year, staying, on average, 9.28 days per visit and consuming on average, \$196,995.87 in total outpatient services per year. The four individuals identified as both outpatient "homeless" patients by St. Mary's and participants of the Reno Police Department's COMP averaged a total of 46.67 visits per year, staying, on average, 10.00 days and consuming on average, \$45,120.33 in total outpatient (or emergency room) services per year.

Between 2002 and 2005, the four individuals identified as "frequent outpatient (or emergency room) flyers" that are either persistently homeless or unable to afford their own health care by St. Mary's and participants of the Reno Police Department's Chronic Offender Mapping Program, accounted for, on average, 30.51% per year of all homeless or unable to afford their own health care patient visits and 20.12% per year of all total charges.

No individual identifiers were provided for the 41 "outpatient frequent flyers" that are either persistently homeless or unable to afford their own health care identified by St. Mary's that received outpatient care between 2002 and 2005. This made it impossible to determine how many individuals of the emergency room patients required more intense medical inpatient care.

## ***Renown Regional Medical Center***

Table 1-8 presents a breakdown of persistently homeless or individual patients unable to afford their own health care identified by Renown Regional Medical Center for 2006.

The 193 total patients listed in Table 1-8 (the 193 total patients is calculated by summing the first column in Table 1-8) are patients admitted to Renown Regional Medical Center's emergency room in calendar year 2006. Table 1-8 shows that the majority of individuals identified as persistently homeless by Renown Regional Medical Center in 2006, 95 individuals or 49.22% of the total identified persistently homeless population of 193 individuals, had

very few visits to Renown Regional Medical Center’s emergency room in 2006. These 95 persistently homeless or unable to pay for services individuals had only two recorded visits to Renown Regional Medical Center’s emergency room in 2006.

**Table 1-8  
Emergency Room “Homeless” Frequent Flyers – Renown  
2006**

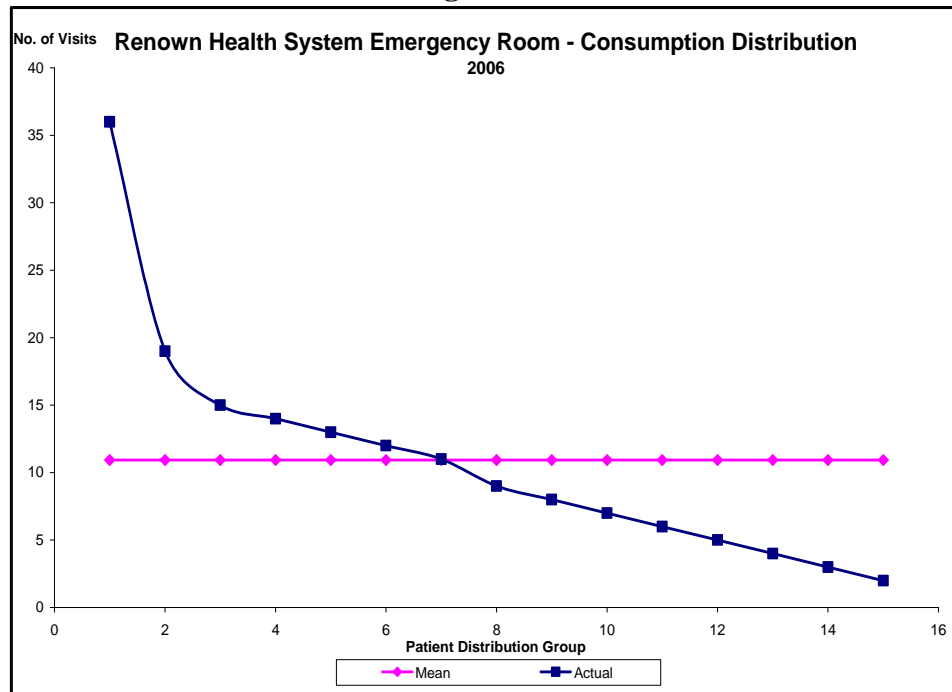
Patient Group	Number of Patients	Percentage of the Whole	Visits per Patient	Total Visits (No. of Patients * Visits Per Patient)	Percentage of the Whole
15	95	49.22%	2	190	24.77%
14	29	15.03%	3	87	11.34%
13	17	8.81%	4	68	8.87%
12	9	4.66%	5	45	5.87%
11	25	12.95%	6	150	19.56%
10	3	1.55%	7	21	2.74%
9	2	1.04%	8	16	2.09%
8	2	1.04%	9	18	2.35%
7	2	1.04%	11	22	2.87%
6	2	1.04%	12	24	3.13%
5	1	0.52%	13	13	1.69%
4	2	1.04%	14	28	3.65%
3	2	1.04%	15	30	3.91%
2	1	0.52%	19	19	2.48%
1	1	0.52%	36	36	4.69%
<b>Total</b>	<b>193</b>	<b>100.00%</b>	<b>164</b>	<b>767</b>	<b>100.00%</b>

Comparatively, Renown Regional Medical Center identified 15 individuals (highlighted in the middle portion of Table 1-8) who had a much higher frequency of emergency room visits than the majority of individuals identified by Renown Regional Medical Center as persistently homeless or unable to afford their own medical care. These 15 individuals accounted for 206 visits to Renown’s emergency room in 2006, accounting for 26.86% of all emergency room visits at Renown Regional Medical Center by the 193 total individuals identified as persistently homeless or unable to afford their own health care. Clearly, a small minority of all identified persistently homeless or unable to afford their own health care individuals at Renown Regional Medical Center in 2006 consumed a substantial portion of all emergency room services provided by Renown Regional Medical Center.

Using the “patient group” in column one of Table 1-8 as the “x-axis” and the “visits per patient” in column four of Table 1-8 as the “y-axis”, Figure 1-2 plots the number of visits per patient for the 193 total patients identified and serviced by Renown Regional Medical Center in 2006 as persistently homeless or unable to pay for their own health care and a “mean” or average number of visits per patient. Figure 1-2 better summarizes this skewed distribution.



**Figure 1-2**



In 2006, the 193 total patients identified by Renown Regional Medical Center as persistently homeless or unable to pay for their own health care consumed an average or “mean” of 10.93 emergency room visits. Eleven (11) or 5.70% of the 193 total identified patients had actual number of emergency room visits at Renown Regional Medical Center in *excess* of 10.93 emergency room visits in 2006. One hundred eight two (182) or 94.30% of the 193 total identified patients had actual number of emergency room visits at Renown Regional Medical Center *less than* 10.93 emergency room visits in 2006. Similar to the data presented for the Washoe County Sheriff’s Office Detention Facility and St. Mary’s Regional Medical Center, a handful of individuals identified as “homeless” consumed a substantial portion of all emergency room services provided by Renown Regional Medical Center to the “homeless” population in the Reno-Sparks-Washoe County area.

### ***Cross Comparison and Summary Observations***

A key limitation of the data studied in this specific report was the availability of datasets for cross comparison at an individual-by-individual level. The authors of this study were only able to secure two data sets that had some degree of individual tracking. They are:

1. Reno Police Department’s Chronic Offender Mapping Program
2. Washoe County Sheriff’s Office Detention Facility Bookings of Individuals identified as Persistently Homeless or Indigent

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Additional data provided by St. Mary's Regional Medical Center and Renown Regional Medical Center did shed some light into the behavior of individual levels of supportive service consumption by the persistently homeless population in the Reno-Sparks-Washoe County area.

However, the available data provided to the authors of this report does provide enough insight to draw some general conclusions. The first conclusion is that there is actually very little cross-over of individuals who are persistently homeless from one dataset to the other. Only 14 persistently homeless individuals were identified as "common" in the datasets provided by the Reno Police Department and the Washoe County Sheriff's Office. Furthermore, St. Mary's Regional Medical Center identified only three individuals amongst their inpatient database common to the Reno Police Department's COMP and only four individuals amongst their outpatient/emergency room database also common to the Reno Police Department's COMP.

The 14 "common" individuals between RPD and the WCSO accounted for 45.16% of the frequent COMP participants identified by the Reno Police Department and 28.00% of the most frequent persistently homeless individuals booked into the WCSO Detention Facility identified by the Washoe County Sheriff's Office. This would tend to suggest that the persistently homeless population in the Reno-Sparks-Washoe County area is much more diverse in the types of first responder, medical and detention facility services they consume. Some are well known by and frequent in their contact with the Reno Police Department, some are frequent in their use of St. Mary's emergency room and inpatient care services, some are frequent in their use of Renown's emergency room services and some are frequent in the number of times they are booked into the Washoe County Sheriff's Office Detention Facility.

The second conclusion that can be drawn from the admittedly limited amount of data available for study is that there seems to be a general decline in the total level of all types of services consumed by a *majority* of persistently homeless individuals in the Reno-Sparks-Washoe County area while a *minority* of persistently homeless individuals in the Reno-Sparks-Washoe County area are consuming more and more of these types of services. Essentially, this means that a smaller minority of individuals are generating the most frequent demand for various types of services and consuming a higher cost of services than the majority of individuals who are persistently homeless. In-terms of a policy implication, this may mean that "intervening" for a small minority of homeless, no greater than 10 to 15 individuals, may have the potential for great cost savings across various service providers combined as well as a substantial net reduction in the demand for various types of supportive services.

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In regards to the development of additional permanent supportive housing for this limited population who are frequent consumers of police, detention and medical services, policy makers will have to decide: 1) whether or not this population is actually suitable for permanent supportive housing by completing assessments for these individuals, 2) whether or not these individuals are likely to remain in permanent supportive housing, and 3) whether or not the economies of scale are sufficient to achieve actual cost savings. Remember, the literature indicates that permanent supportive housing is only successful from a cost-benefit perspective if substantial economies of scale can be realized. The large initial investment required in the development of new permanent supportive housing, in addition to the ongoing costs associated with continued operation, must be balanced against how to most effectively allocate resources.

The third and final observation that can be drawn from the limited amount of data available for study is the need for more comprehensive data that spans multiple service providers not only in the Reno-Sparks-Washoe County area but across a larger regional geographic area across northern Nevada. Both service consumption data and cost data needs to be tracked, by individual, across all the service providers. Without this cost data, it will likely remain impossible to adequately measure the total cost, in-terms of direct fixed costs, indirect fixed costs, direct variable costs and indirect variable costs, associated with providing a wide range of supportive services to the persistently homeless population in the Reno-Sparks-Washoe County area. Until these limitations are overcome, it will be difficult to properly ascertain the effectiveness of any of the housing and supportive services programs, including additional permanent supportive housing programs, in the Reno-Sparks-Washoe County area.