

**On the viability of subscription patrol and restitution services<sup>1</sup>**

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**Abstract**

A business model for subscription-based patrol and restitution is presented and defended with empirical and economic arguments. Secondary market research and pilot results of primary market research indicate potential viability.

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<sup>1</sup> Please do not quote this paper without permission from the corresponding author.

## Introduction

Subscription-based patrol and restitution (SPR) services were suggested by Molinari<sup>2</sup>, the Tannehills<sup>3</sup>, Rothbard<sup>4</sup>, and Friedman<sup>5</sup>. Alternative arrangements have been suggested by Barnett<sup>6</sup> and Murphy<sup>7</sup>. Criticism has come from Nozick<sup>8</sup>. We are decidedly in favor of the proposal for SPR and consider it to be a key to the prospects for the triumph of laissez faire. Our case for this perspective is made later in this paper.

## The Business Model of SPR

Concreteness has many virtues. Below is an offering from a fictional SPR business, Woodlands Patrol and Restitution (WPR):

### Services:

1. residential subscription-based patrol, ~\$35/mo.
2. first-responder for monitoring systems, guaranteed response time
3. monthly report on area crimes for all subscribers
4. premium patrol services:
  - a. once-a-day house check while out of town, first 10 days per year included with 1 year subscription, \$2/day thereafter
  - b. mail/newspaper and feed/water pets, first 3 days per year included with 1 year subscription, \$5/day thereafter
  - c. security inspection of house, free with 1 year subscription
5. if a property crime occurs, current subscribers only:
  - a. WPR conducts investigation
  - b. WPR attempts to engage perpetrator in mediation or arbitration for restitution
  - c. If this doesn't work, WPR pays out settlement to cover victim's losses, capped at the greater of total subscriptions paid in or homeowner's insurance deductible

### Patrol:

1. mounted on quiet motorcycles (Honda Helix)
2. community policing model
  - a. watching to prevent crime – visibility and observation
  - b. active discussion with locals about potential hotspots and potential delinquents in the neighborhood
  - c. refer discovered problems to community service organizations

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<sup>2</sup> “De la production de la sécurité,” in *Journal des Economistes* (Feb, 1849), pp. 277-90. Webbed at <http://praxeology.net/GM-PS.htm>

<sup>3</sup> *The Market for Liberty* by Linda and Morris Tannehill, Fox and Wilkes, San Francisco, 1993(1970).

<sup>4</sup> *Power and Market* by Murray Rothbard, Sheed Andrews and McMeel, Kansas City, 1977. Webbed as part of *Man, Economy, and State with Power and Market* at <http://www.mises.org/rothbard/mes.asp>

<sup>5</sup> *The Machinery of Freedom* by David Friedman, Harper and Row, 1971.

<sup>6</sup> *The Structure of Liberty* by Randy Barnett, Oxford University Press, 1998.

<sup>7</sup> *Chaos Theory: Two Essays on Market Anarchy* by Robert Murphy, private publisher, 2002.

<sup>8</sup> *Anarchy, State, and Utopia* by Robert Nozick, Basic Books, New York, 1974.

- d. particular focus on subscribers and their demands
- e. cull for information about crimes committed

**Investigation:**

1. relies on community policing intelligence
2. WPR must be first on scene to collect evidence, statements
3. WPR investigator to work with patrolmen
4. WPR adjuster assesses losses

**Restitution:**

1. confront suspects / parents of suspects with evidence
2. explain procedure to suspects and follow:
  - a. attempt to engage suspect in mediation with victim
    - i. result: contract between suspect and victim
  - b. if not, attempt to engage suspect in binding arbitration
    - i. result: contract between suspect and victim
  - c. if not, send a *Notice of Refusal to Arbitrate* to neighbors, friends, employer, insurance company, and others that associate with suspects. To be a client of WPR, suspect must pay a premium for a term of 5 years
3. WPR pays to victim:
  - a. When? Once procedure above is complete, net 30 days.
  - b. How much?
    - i. if mediation or arbitration, nothing.
    - ii. otherwise, actual losses net of other insurance but capped at total of subscriptions paid in (“money-back guarantee”, not insurance)
    - iii. actual losses per WPR adjuster but open to mediation/arbitration at client’s option

Each of the elements of this business model has been carefully chosen. We will now address some of these in more detail.

**Why patrol?**

The Kansas City Preventative Patrol Experiment<sup>9</sup> ranks among the few major social experiments ever to be completed:

The year-long experiment tested the effectiveness of the traditional police strategy of routine preventive patrol and sought to determine whether the resources in the Kansas City, Missouri, Police Department ordinarily allocated to preventive patrol could safely be devoted to other, perhaps more productive strategies. [...] Three controlled levels of routine preventive patrol were used in the experimental areas. One area, termed “reactive,” received no preventive patrol. Officers entered the area only in response to citizen calls for assistance. This in effect substantially reduced police visibility in that

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<sup>9</sup> For an introduction to the literature of the experiment, see THE KANSAS CITY PREVENTIVE PATROL EXPERIMENT: A Summary Report, By George L. Kelling, Tony Pate, Duane Dieckman, and Charles E. Brown, Police Foundation, Washington, D.C., 1974. Webbed at <http://www.policefoundation.org/docs/kansas.html>

area. In the second area, called “proactive,” police visibility was increased two to three times its usual level. In the third area, termed “control,” the normal level of patrol was maintained. Analysis of the data gathered revealed that the three areas experienced no significant differences in the level of crime, citizens’ attitudes toward police services, citizens’ fear of crime, police response time, or citizens’ satisfaction with police response time.

If we are to assume the commonsense premise that patrol does, indeed, affect crime; and if we accept the results of the Kansas City Preventative Patrol Experiment -- and the extent of documentation and attention to protocol is persuasive on that account; then, there are only three possible explanations for the results regarding crime. Perhaps, as some interpret the results, the elasticity of crime and security to quantity of patrol is incredibly small. Perhaps the quantities of patrol were in a “saturation” regime, where the marginal benefits of policing were so low that even cutting patrol in half did not result in a measurable change. But perhaps, and this is the perspective that we advocate, the quantities of patrol were in a “starvation” regime, where the starving social patient suffering the malady of a high crime rate was fed not 100, but 200 to 300 calories of patrol sustenance, with little change in the prognosis of the patient – that is, to see a statistically significant change in crime rates, a substantially higher patrol presence would be required than mere doubling or tripling. This latter interpretation is favored by those who also advocate the “broken window effect”, where only a small degree of visible criminality results in a tipping point<sup>10</sup> that changes expectations and perceptions of incentive structures, ushering in a much higher crime rate.

Whatever the interpretation of the Kansas City Preventative Patrol Experiment, it is clear from common experience, and verified by the pilot market research reported here, that patrol is regarded as a fundamental security good -- the “watching” component of Sherman’s triad of “watching, walling, and wariness”<sup>11</sup>. As Benson explains,

Watching refers to observing people and places that criminals may attack and apprehending criminals in the act. Walling describes actions designed to prevent criminal access to persons or property through the use of locks, bars, fences, and other obstructions. Wariness characterizes adjustments in behavior to avoid the consequences of crime, such as taking self-defense or firearms classes, staying home at night, and leaving lights on when away from home.

From the perspective of economics, it is clear that “watching” is most likely to result in external economies. This is true for two reasons. First, both walling and wariness are particular to the person or place.<sup>12</sup> A lock is put on a private house, and this does not prevent a break-in next door. Staying home affects you, not your neighbor. Not so with regard to watching. A neighborhood watch group benefits the whole neighborhood with

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<sup>10</sup> See *The Tipping Point: How Little Things Can Make a Big Difference* by Malcolm Gladwell, Little Brown and Company, 2000, for a discussion of this thesis in connection with the dramatic reduction in crime under New York City Mayor Rudolph Giuliani.

<sup>11</sup> “Patrol Strategies for Police” by Lawrence W. Sherman in *Crime and Public Policy*, ed. James Q. Wilson, pp. 145-64, Institute for Contemporary Studies, 1983, as quoted in *To Serve and Protect: Privatization and Community in Criminal Justice* by Bruce Benson, The Independent Institute, 1998.

<sup>12</sup> A possible counter-example is widespread use of concealed weapons, as defended in *More Guns, Less Crime* by John Lott, University of Chicago Press, 2<sup>nd</sup> edition, 2000.

its vigilance. Second, the institution of public property can limit the ability of people to capture these external economies. Counter-examples make this the most clear: gated communities, private streets, wholly-private shopping malls as compared to strip malls along public roadways, etc.

All of this has made the case, in the eyes of some, for tax-funded provision of patrol services. There are legion problems with this position, as Benson and others have carefully demonstrated. However, those claims and counter-claims will not be explored here. Instead, we conclude this section by noting that patrol is important, and is effectively demanded through both the market and political institutions.

### **The Importance of Insurance**

This business model addresses the free riding problem of patrol services by tying it to restitution. While many anarchist theorists have identified insurance as an important force in the emergence of anarchism, there are practical problems with the view that insurance companies will be the agent of change in the provision of patrol and restitution.

The current state of homeowner lines was summarized in the ad copy of a panel held at the 2002 Casualty Actuary Society meeting<sup>13</sup>:

Homeowners insurance has become the second largest line of business in the property/casualty product portfolio. Nevertheless, profitability in this line has long been elusive, with the industry operating ratio being less than 100 percent only four times in the past 20 years. Adding to the dismal picture, recent results have been battered once again by the growth of claims related to mold and catastrophes. The possibility of catastrophic losses due to terrorist activities has generated an additional level of concern.

Where in this discussion is burglary and vandalism? It turns out that there are much bigger fish to fry. Burglary and vandalism only account for a small portion of the exposure of homeowner's policies, ever since the innovation of the homeowner's policy in the 1950's<sup>14</sup>. This is not to say that rising crime rates in the 1960's and 1970's did not affect insurance companies' bottom lines – they did. But, the response was better modeling and increased premiums. Further, with the move away from direct verification of burglary<sup>15</sup> to co-insurance, and then later, to high deductibles to combat fraud, homeowners were no longer covered by most of the chrematistic losses that crime engenders. If your house was burglarized today, and losses amounted to \$1500, you may not have even met your deductible!

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<sup>13</sup> Captured from the website of the Casualty Actuarial Society, <http://www.casact.org>

<sup>14</sup> See "Homeowners Insurance Ratemaking" by Michael Walters in *The Proceedings of the Casualty Actuarial Society of 1974*, webbed at [casact.org](http://casact.org), for a brief history of the changes in homeowners insurance ratemaking from the 1950's to the 1970's.

<sup>15</sup> It was the method of residential burglary insurers from its inception in 1895 to have adjusters confirm that forcible entry had been made, as described in "Burglary, Theft, and Robbery Insurance" by G. F. Michelbacher and L. H. Carr in *The Proceedings of the Casualty Actuarial Society of 1924*.

Lastly, it must be emphasized that the “crime” lines that receive the most attention from insurers are in the commercial lines, which are already well served by patrol companies, as well. Again, the reason is the ability to internalize benefits. Companies are often able to internalize externalities by having large private areas that are fenced, guarded, and/or patrolled. Most homeowners don’t have the extent of property to justify dedicated guards and/or patrol, other than perhaps guard dogs.

Besides meeting the desires of homeowners to once again enjoy burglary insurance with no deductible, patrol and insurance make a powerful pair. By tying these services, it aligns the interests of the patrol company with the client. Some clients may be rightfully worried that a patrol company could hire ne’er-do-wells that spend their time on “patrol” casing the very homes that they are charged to protect, only to burglarize them on their free time. Although such a company would not long maintain its reputation, and we could theorize all we like about Coasean side payments to protect reputation, such payments are made explicit and contractual in the arrangement proposed.

Further, this alignment of interests allows for economization through money calculation in the sphere of crime prevention. Although today, there are some deductions which are common (home monitoring system, deadbolts and proper window locks), this business model, with its 100% focus upon the peril of crime, is likely to discover other deducts. For instance, we might postulate that gun or dog ownership could also be important. The company would then be able to actuarially estimate the loss prevention associated with certain behaviors, and be able to pass those savings to clients who chose them.

### **Why First Responder?**

We have already alluded to the fact that as early as 1895, it was clear that fraud could be effectively controlled by contractually requiring proof of forcible entry for burglary insurance. Although the current practice of high deductibles is most economical for the insurance industry, the same would not be the case for this business model. Here, agents of the company are frequently near the scenes of burglaries, and can verify burglaries with minimal marginal cost.

Further, patrol of the areas will give the agents of the SPR a comparative advantage over monitoring companies and even governmental patrols in their ability to be first responders. Why? The monitoring companies have a much lower coverage density than what will obtain in this business model. Governmental agents have duties that exceed those of the proposed patrol agents (traffic duties, summons to serve, etc.); and, as expressed to one of us<sup>16</sup> by a sheriff, patrol is usually distributed according to need, not by population density or tax base density. Said another way, government patrol is funded by each according to his ability to pay (percentage of homeowner value) and distributed to each in accordance with need (high crime areas). For these reasons, it is likely that this

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<sup>16</sup> Gil attended the Citizen’s Sheriff’s Academy in Montgomery County, Texas in 2002, where he had the chance to learn about the many operations of the Sheriff’s department, as well as discuss the SPR business model with Sheriff Tommy Williams and many of the Sheriff’s deputies.

business model will allow patrol agents to beat the mean response time of other patrol providers.

## Why Investigation?

Vertical integration of what might be termed the *crime cycle* makes the most sense for a consuming public that is trending toward simpler (for them) all-in-one solutions, and it also offers advantages for economization of resources for the company. The *crime cycle*, as termed here, includes the investigation of the crime, the engagement of the perpetrator or suspects in mediation or arbitration, the recording of facts for institutional learning, and the assumption of new behaviors to prevent crime.

Not only will in-company, as opposed to outsourced or third-party, investigation improve the prevention of fraud, it has the advantage of seamless integration with intelligence from patrol officers and the SPR company's legal, adjuster, and actuarial staff, who will set limits on the amounts that can be spent on each investigation.

## Why Premium Services?

Every service which is tied to patrol helps to combat the free rider problem. This is true for Investigation, and also for the premium services, which would likely be available to non-subscribers at higher rates.

The premium services offer an all-in-one away-from-home package. As mentioned before, the marginal cost of providing these services are likely to be lower than even professionals that operate in this area already. For instance, to provide for feeding and watering pets, and bringing in mail and papers, the patrol agent need only perform the service once he is already at or near the house which he will already be charged with patrolling every day. Professional pet sitters must undertake the relatively large transaction cost of traveling to the home for which they have contracted. Also, there is the issue of trusting an individual or company with one's house key: this trust is already earned in the case of the SPR company due to the alignment of interests mentioned above. For these reasons, pet sitting and house-watching while a house is empty is still largely the province of friends and neighbors, but could easily be a profitable sideline to the SPR company.

## Why Mediation?

Mediation is a dispute resolution technique, elements of which anarchist theorists, especially economists, should be keenly aware.<sup>17</sup> In the technique, disputants (in this case, a victim and perpetrator or alleged perpetrator) are brought together, and the mediator takes a strictly neutral role, being careful not to display any favor to one side of the dispute. Each side tells his tale, and is coaxed to expose all of the important issues at

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<sup>17</sup> Both Gil and Brian have taken courses to become trained as mediators at the Montgomery County Dispute Resolution Center, and have subsequently mediated cases. They have mediated cases involving divorce/custody, alleged real estate fraud, alleged business improprieties, and other types of disputes.

hand. Then, the issues are addressed by means of the mediator eliciting from the disputants mutually-agreeable solutions. The result, if mediation is successful, is a contract which states what each disputant will do (such as a monetary payment, etc.).

Mediation has the advantage of being a Pareto-optimal institution. But it goes much further than that. Victim-Offender mediation has these advantages and outcomes<sup>18</sup>:

Through this process, crime victims have an opportunity to get answers to their questions about the crime and the person who committed it. They take an active role in getting their material and emotional needs met. Research indicates that victims who participate in VOM receive more restitution than those who do not and feel safer and less fearful afterwards than those who do not.

Offenders have an opportunity to take responsibility for what they have done. They learn the impact of their actions on others. They take an active role in making things right, for example, through restitution, apology, or community service. Research indicates that offenders who participate in VOM feel they were treated more fairly than those who do not, and have a higher rate of restitution completion than those who do not.

The reason for participants' satisfaction with mediation is that all of their needs are addressed, and solutions are crafted by the parties themselves. This is an extremely important example of how Hayek's "knowledge of the particular circumstances of time and place" applies. Even the mediator does not usually have key information that the participants have. By way of example, one of us mediated a case wherein part of the contract involved exchanging title to a crop of marijuana<sup>19</sup> that was not mentioned until the mediation contract was being written in the closing minutes of a 3-hour mediation session, the two participants implicitly knowing that that property could and probably would be exchanged as part of the contract. While not all participants to victim-offender mediations know one another, some do. And, it is rarely the case that an arbitrator or judge will fully understand what is *really* important to a victim or offender.

The values and reality of Victim-Offender Mediation should appeal to anarchy theorists, but has largely flown under their radar<sup>20</sup>:

The idea of bringing together a victim of a crime and the person who committed that crime is based on age-old values of justice, accountability, and restoration. The first "Victim Offender Reconciliation Program" was started in Kitchener, Ontario, Canada in 1976; the first VORP in the United States was started in Elkhart, Indiana in 1978. In 1990, there were approximately 150 such programs; in 2000, there [were] more than 1200 programs world-wide.

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<sup>18</sup> Taken from the website of the Victim-Offender Mediation Association, [www.voma.org](http://www.voma.org).

<sup>19</sup> Care was taken to refer to the crop without mentioning its exact nature, so that the contract would, in fact, be a legal contract, at least *prima facie*.

<sup>20</sup> Again, taken from [www.voma.org](http://www.voma.org). As an example of mediation flying under anarchists' radar, a brief perusal of the index of Barnett's *Structure of Liberty* shows no entry on the subject. On the other hand, Benson covers victim-offender mediation well in his *To Serve and Protect*.

It goes without saying that the institution of victim-offender mediation is virtually unknown among the general public, and one advantage of the proposed business model is that it would bring this powerful technique to wider application.

### **Why Arbitration?**

Arbitration is much more familiar to anarchist theorists. Arbitration consists in bringing together disputants with a mutually-agreeable, usually disinterested, party to hear the facts of a case and pronounce a judgment on the matter. The result of binding arbitration, like mediation, is the creation of a contract at the close of the arbitration. Its principal virtue is the ability to create agreement where mediation fails to find one.

What has often concerned anarchist theorists is how arbiters should discover norms for use in arbitration<sup>21</sup>. While we will not retread the literature, we must point out that mediation casework is an excellent source for the discovery of “restitution payments perceived to be ‘fair’ by members of the community,” as sought for by Benson<sup>22</sup>, for instance.

Before leaving the general topic of dispute resolution, we must voice our concern about the over-emphasis and over-analysis of theoretical legal structures that occupy books such as Barnett’s *Structure of Liberty*<sup>23</sup>. Not only is most dispute resolution easy, in the sense that the techniques of mediation and arbitration are ancient, and have had a continuous history; but, dispute resolution is really a small part of the private production of defense. As Hoppe<sup>24</sup> has rightly pointed out, the Hobbesian/Lockean account of the need for collective security is the main bugbear to be vanquished, being entrenched in even that most libertarian of public documents, the Declaration of Independence: “...that to secure these rights, governments are instituted among men.”

The overall production of defense is largely expenditures of time and material to deter and prevent crime. Crime is a rare event for most. Actually finding the perpetrator is rarer still. If the perpetrator is found, most cases are “easy”, in the sense that a theft requires restitution, and the only real question is the method of payment and the amount. But, even if the judgment is awarded, payment is not always forthcoming from the offender. So, of what real consequence is the adjudication? This is perhaps too harsh of a rhetorical question, but it fairly represents the attitude of many citizens when they contemplate the

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<sup>21</sup> Leoni and Barnett beg the question by reference to precedent in historical systems. Rothbard, Hoppe, and Kinsella advocate natural law reason. We are skeptical of natural law reason informing a process which is, scientifically, an impossible act: to intertemporally and interpersonally compare utilities and disutilities and to set things as right as possible given practical limitations. Jan Lester in his *Escape from Leviathan* thinks this can be done on a much larger scale, but never offers practical advice, in our opinion. We think our proposal to use mediation casework is not question-begging, and provides the practical solution to this challenge in arbitration.

<sup>22</sup> “Restitution in Theory and Practice” by Bruce Benson in *The Journal of Libertarian Studies*, vol. 12, no. 1, 1996.

<sup>23</sup> This is not to say that this book is not important. Indeed, we regard it as one of the top ten essential contributions to modern anarchist thought.

<sup>24</sup> “The Private Production of Defense” by Hans-Hermann Hoppe in *The Journal of Libertarian Studies*, Vol. 14, no. 1, 1999.

advantages and disadvantages associated with calling the cops when a crime is perpetrated. By way of support, there is a long-standing gap between the amount of crime reported in the FBI's Uniform Crime Reports and Criminal Victimization Study. For instance, in 2003, the NCVS shows 14.198 million thefts, but the UCR shows only 10.435 million total property crimes. The methodology of the NCVS is to survey people, whereas the methodology of the UCR is to count reported incidents.

### **Absolute Division of SPR and Adjudicative Services**

Not only is adjudication a small piece of the pie, and we think it will continue to be so; but, there would be a fundamental conflict of interest if mediators and arbitrators were employees of the SPR. They would be agents of parties in the dispute, and therefore have the color of bias, and the fact of interestedness.

Beyond that, the work of mediation, arbitration, and patrol-and-restitution are completely different types of activity. There is no material reason to combine them into a conglomerated business. Arbitration and mediation arms would only be PR albatrosses to an SPR company.

Notwithstanding this fundamental insight, Nozick, in his *Anarchy, State, and Utopia*, built his entire case against the stability of anarchy upon the mistaken notion that patrol-and-restitution companies would be one and the same with the adjudication firms. We cannot underscore this point heavily enough: *private security and adjudication do not mix in any way that is rational for either consumers or business.*

Another error is presented in the strange penultimate chapter of Barnett's *Structure of Liberty*, wherein the main provider of security of rights is a Blue Coif/Blue Gavel, improperly placing the adjudicative services in a pre-eminent position, and strangely segregating insurance and patrol. Barnett seems to think that the insurance function should be tied to the adjudicative business, but he is somewhat unclear about this. We must critique this arrangement on the grounds that, like any proper financial risk arrangement, it is most efficient for the party that has the best ability to control the risk, to bear that risk. In this case, the patrol company is most competent to control the risk by deterring crime. What can an insurance-cum-legal-services company do to mitigate its crime exposure? Sadly, it could innovate with lower and lower judgments, to save its bottom line. That business model does not seem sound.

### **The Question of Searches**

An open question, to which we hope some comment will be made by readers, is the question of whether the SPR should attempt to conduct searches as part of its investigation work. In particular, should the SPR require that subscribers assent to warranted searches, on pain of either higher monthly subscription or outright termination of service? And, should the SPR request searches when warranted of non-subscribers? And, if the non-subscriber refuses, should a sanction be imposed, such as a

communication to the employer, insurance company, neighbor, relatives, and/or other associates of the refusing non-subscriber?

There are advantages and disadvantages to these approaches, and there are some economic and ethical issues here, too. If, in Rawlsian/Olsonian fashion, we could get all potential searchers behind a veil of ignorance to either agree or disagree to a specified procedure of how warrants would be affirmed and searches conducted, then we could solve this issue and move on. In the real world, an Olsonian might point out that warranted searches are properly a benefit, and therefore properly prescribed by governments. We don't find such a hand-waving argument persuasive. Show us that this is what people prefer by their revealed, specific actions!

What is clear is that in modern-day America, a private company attempting to place a warranted-search rider in a contract would likely suffer lower subscription revenue and adverse PR consequences. And, for cases that it truly matters (where one member steals from another member of the same household), the rider to search the crime scene will already exist, to ferret out excluded claims.<sup>25</sup>

Therefore, our current thinking on the matter is that such an animal as warranted searches would simply not be used in this business model. One may immediately object that this will certainly be less than optimal, but such an objection assumes too much. If the losses due to company procedures not including searches are too great, pressure will be brought to bear by the company on insureds to sign such a clause, either for a discount, or as a standard condition.

Further, if such searches would result in fewer claims paid out, then pressure would also be brought to bear on SPR's to issue *Notices of Refusal to Consent to Search* to other insurance companies, which would allow for the collection of relevant data, and finally result in revenue sharing agreements for insurance companies that agreed to place such clauses in their insurance contracts.

All of this could easily be done in the future, and need not immediately be implemented. For this reason, it is not currently part of the proposed business model.

### **The Question of Arrest Powers**

When interviewing a Sheriff's deputy<sup>26</sup> regarding this business model, he was asked what would most concern him about working for an SPR firm. His main concern (besides pay) was that he would no longer have the power of arrest. We came to fully understand this objection in a book written by a police officer<sup>27</sup>, wherein he characterizes as voluntary compliance the acquiescence of a citizen in the face of a police officer's threat, clothed in

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<sup>25</sup> It is clear that such claims must be excluded, as they have been in residential burglary insurance from the very beginning. This is usually substantially addressed by the forcible entry requirement.

<sup>26</sup> Corporal Joel Gordon of the Montgomery County Sheriff's Department, interview conducted by Gil Guillory on 02 December 2005.

<sup>27</sup> *Verbal Judo: The Gentle Art of Persuasion* by George J. Thompson, HarperCollins, 2004(1993).

persuasive prose, of course. For example<sup>28</sup>: “‘Sir, listen, that’s an interesting distinction between whether it’s your bottle or your buddies’ [in your car], but the law does not make that distinction. ... Step on out, sir. ... That way it looks as if you’re gonna be able to go home tonight, put your feet up, be with your family, eat at your own table, sleep in your own bed, and get up in the morning and go to work. I’d like to think you’d want to do that, sir, but the law gives you another option if you wish. The law says that if you want, you can come with us, eat with us, stay overnight, sleep with us. That’s called an arrest.’ ... Those were options, not threats[!], and they worked.”

The threat of arrest is useful and commonplace in modern police work, and so it is difficult for many patrol officers to imagine working without it as a tool at their disposal. Of course, this is not to say that SPR officers could not use force. Under Texas State law, for instance, criminals engaged in what amount to *malum in se* offenses can be placed under citizen arrest. This is all that would be necessary for an SPR firm starting out.

It would also have at its disposal, should it wish to invoke it, the ability to issue a *Notice of Refusal to Arbitrate* to the employer, insurance company, neighbor, relatives, and/or other associates of the refusing non-subscriber. Similar to the *Notice of Refusal to Consent to Search*, this could develop organically.

### **Why Cap Settlements?**

There are many reasons to cap claim settlements. One, of course, is purely a startup concern regarding capitalization. Another is the spectre of insurance regulation. If settlements are capped at what the subscriber has paid to the SPR firm, and the purpose of the firm is not solely to insure (which is also true), then the settlements are effectively money-back guarantees, which are not subject to insurance regulation.

A capped settlement encourages establishment of long-term contracts, such as was typical of the infancy of internet service provider and cell phone business models a few years ago. This would provide the necessary “paper capitalization” for the money-back guarantee to cover the most or all of the homeowner’s deductible, while also resulting in financial stability for the company, instead of on-again, off-again subscriber “churn”.

However, should the SPR firm wish to eventually provide full coverage immediately to subscribers, this initial offering would allow the firm to build its reserve capital and actuarial database over time to become qualified as a true insurance company.

### **Why Crime Reports?**

A fundamental aspect of the security good is the generation of feelings of security. Objective reporting of crime in the area, with an annotated map, would be an excellent addition to the total crime solution that an SPR firm offers. It will already be collecting and summarizing such data for actuarial and patrol purposes, as well as tracking the disposition of cases that go to mediation and arbitration. The extra labor to compile

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<sup>28</sup> Ibid., p. 97

newsletters by census tracts, or Zip codes, or some other geographic subdivision<sup>29</sup>, would be worthwhile for the following reasons:

- it would give the SPR firm a means to continue its marketing to maintain subscribers
- procedures could be explained
- premium services could be recapped
- subscription discounts could be recapped
- successes could be reported
- crime prevention tips could be given
- biographical profiles of patrol agents could be given, resulting in more trust and feelings of familiarity with the company
- if sent with the monthly bill, it may soften its reception

Of course, to supplement its income, the SPR would be wise to allow advertising in its newsletter. Likely advertising accounts would be with mediators and arbitrators, who are seeking a market for their services. These mediators and arbitrators would likely not limit themselves to victim-offender advertisements, but advertise their full range of services.

A concern may be raised that the SPR firm, in reporting crime, would be in danger of succumbing to, or even just being perceived as, fear-mongering to maintain subscriptions as high as possible. It is our opinion that if the crime reports are given in an objective way, this reaction by the public will be minimized. Unlike TV news broadcasts, the bread and butter of the SPR firm is not sensationalism, but crime prevention through patrol. It has little to gain by being sensationalistic, and much to lose.<sup>30</sup>

### **SPR Will Combat Socialism**

Before talking about broader issues, we now turn to some discussion of why the SPR firm would be a force for liberty more generally. There are hopes among anarchists for the realization of anarchy. Narveson<sup>31</sup> is decidedly pessimistic. Kennedy<sup>32</sup> sees hope in business, not “movements,” and to some extent, we agree. We are decidedly pessimistic with regard to politics.<sup>33</sup> Higgs<sup>34</sup> has shown that governments often grow during times of

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<sup>29</sup> In a more mature industry of SPR's, it may be that an important resultant of patrol and actuarial activity is to group geographic areas into risk zones, and these divisions would be the natural divisions for different newsletters. Alternatively, a continuous model might evolve, whereby each crime report would be individually created by computer, printing a map centered on the subscriber's house and reporting crime within a specified radius.

<sup>30</sup> We also note that in the course of the marketing research pilot reported below, one of the interviewees made several reference to his scouring of newspaper crime reports for information relevant to his neighborhood.

<sup>31</sup> *Respecting Persons in Theory and Practice* by Jan Narveson, Rowman & Littlefield Publishers, 2002, p. 198

<sup>32</sup> “The Revolution Will Be All Business” by John T. Kennedy, June 2002, [www.anti-state.com](http://www.anti-state.com)

<sup>33</sup> Though we both still maintain our affiliation with the Libertarian Party.

<sup>34</sup> *Crisis and Leviathan* by Robert Higgs, Oxford University Press, USA, 1989.

crisis, and do not shrink – his so-called “ratchet effect.” We offer a story that augments his.

When a social crisis occurs, people look to existing institutions to solve the problems posed by the crisis. People are not generally ideological, but practical. If an institution can solve problems, or make a good case that it can, then it will be embraced by people, and given more social power. For anarchism to triumph, we need only put voluntary institutions in place that can grow in times of crisis by solving problems or making a good case that it can, when such crises arise.

We have already shown that an SPR firm will have the ear of its subscribers in a regularly-published newsletter. It is of course also possible that a crisis would allow for special communications to subscribers. It will have at its disposal the means to offer and persuade at least existing subscribers in times of crisis.

Of course, it is itself an institution that can expand in scope. As currently envisioned, it would cover only property crimes. But, in the right milieu, it may be viewed, even by state authorities, as competent to cover, investigate, and bring to agreeable resolution other crimes: rapes, battery, even murder. In the right milieu, it may be viewed as competent to provide for extraordinary patrol during the aftermath of a natural disaster, such as was recently experienced in New Orleans. Again, in the right milieu, it may be viewed as competent to ensure and/or insure the safety of passengers on selected flights.

Not only does it position itself for future growth, but it does the same for mediation and arbitration. Its subscription service creates direct demand for mediation and arbitration, but the fact that subscribers also pay to receive advertisements of mediation and arbitration each month means that a broad familiarity with these institutions can develop in the public consciousness. They, too, can serve broader segments of the population, both incrementally, and in leaps, in the right circumstances.

While not specifically elaborated above, Patrol item 2c of the outline of the business model refers to the fact that problem areas, such as spousal abuse, child abuse, newly broken home, truancy, delinquency, animal abuse, job loss, and other proximate indicators of potential criminal activity would be communicated to churches, welfare agencies, shelters, charities, and other organizations whose mission it is to find and address these social problems. As the emerging eyes of the community, much goodwill could likely be generated by an SPR firm that develops relationships with other voluntary community organizations<sup>35</sup> in the joint betterment of the community. With such an extensive reach, the SPR firm would be well-positioned to seize opportunities for growth in a crisis.

It might be hoped that education alone will someday result in an end to malum prohibitum laws, the cessation of state monopolies, and an end to taxation; but it is our

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<sup>35</sup> By way of an example of such an organization, Brian used to volunteer at the Sexual Abuse and Assault Free Environment (SAAFE) House in Huntsville, Texas. SAAFE House provides a number of services to victims of domestic violence and sexual assault. See [www.saafefhouse.org](http://www.saafefhouse.org).

conviction that this change will not come from education alone. Instead, real solutions that are virtually ready-made must be before people before they will give up their reliance on the state for the solution to their real and perceived problems. The SPR firm is the Big Kahuna, the Ghost of Laissez-Faire Future.

### **Challenges to SPR from Economics**

Barnett, in his *Structure of Liberty*, offers a compelling taxonomy of problems that must be addressed by any approach to social ordering. Taking it as inspiration, and sprinkling in a few more objections, concerns, and questions, we will address broader questions on the SPR model below.

### **Free Riding / Underproduction**

As we have written, we have attempted to address free riding by tying goods that are clearly “internal”. As Hoppe has pointed out<sup>36</sup>, a public good or externality is only what someone thinks is a public good or externality. We agree. Many economists think of free riding as an objective fact inherent in the provision of a good<sup>37</sup>. On the contrary, it is an empirical question of demand. The marketing research pilot suggests that free riding is not a concern to consumers with respect to the SPR business model.

### **Multiple Firms**

A number of issues arise in the consideration of multiple SPR firms. The first series of questions regard how firms will interact with one another. The second series of questions relates to the broader implications of these answers. We will deal with the issues in this sequence.

Will firms share information? Yes. The marginal value of withholding patrol intelligence from a competing SPR firm is virtually zero, but the marginal value of getting a key piece of patrol intelligence from a rival firm could mean the difference between getting the perpetrator to pay for damages and having to issue a claim settlement, possibly totaling \$2000. In the same way, the disposition of mediated and arbitrated cases, the frequency and severity of crimes, and other key data would likely be shared. There is precedent for this in the insurance industry. As early as 1905, the Burglary Insurance Underwriters Association was formed to share information of just this sort<sup>38</sup>.

What about sharing information with a tax-funded agency? The same arguments apply. It might be expected that the tax-funded agency would demand payment for the information. But perhaps not. In the case of the BIUA, Garrison reports that “The Bureau

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<sup>36</sup> “Fallacies of the Public Goods Theory and the Production of Security” by Hans-Hermann Hoppe in *The Journal of Libertarian Studies*, vol. 9, no. 1, 1989.

<sup>37</sup> Good examples of this sort of sloppy reasoning are found in *What It Means to be a Libertarian* by Charles Murray, Broadway, 1997, in his treatments of public schooling, pollution abatement, and roads.

<sup>38</sup> “Burglary Insurance Statistics” by Fred Garrison in *The Proceedings of the Casualty Actuarial Society of 1915*.

has several times been requested by the public authorities to furnish specific information respecting the number of burglaries in certain cities, the kind and value of goods stolen, and similar information. This information can be furnished under the present system if it is deemed advisable to use it for such purposes.” So, the information flow may go to the tax-funded agency, not from it. Again, the expectation would be reciprocity or payment for providing information.

Will firms patrol in the same area? Yes. There is some degree of externality, whereby patrol by one company would benefit another, and vice versa, so we must consider this. SPR firm A expanding into territory that is already served by SPR firm B faces a very good prospect. He can write subscription contracts and provide limited patrol, thereby free riding on SPR firm B. Why wouldn't he do that? Tit for tat, that's why. SPR firm B could do the same in A's territory. Experience or a little entrepreneurial foresight – they wouldn't need Axelrod – would show them that they should write a contract to account for patrol credits. It would likely evolve into a sort of clearinghouse agreement whereby hours of patrol or some other metric would be credited in each geographic region and then compared against subscription density in the region. Then balancing payments would be made to account for overages or shortfalls. Would there be a race to the bottom? That is, would firm A start patrolling less, just to get a favorable balance of payments from firm B; and then firm B retaliate by patrolling even less? No, because their patrol is the means by which they keep subscribers – no patrol, unhappy subscribers. And, for the subscribers that remain, the ultimate check on such ludicrous behavior is the fact that less patrol = more crime = more and larger settlements.

How will an SPR firm treat a tax-funded patrol provider? Differently. Imagine that an SPR clearinghouse attempted to get all of the local patrol providers to join the patrol clearinghouse, in an effort to rationalize its costs. Since the tax-funded patrol providers have no clients, it would be unwise for the SPR's to pay the tax-funded patrol, for that would be an undue burden upon their clients. Further, the mode of patrol would be different, and so would not be easily compared to the SPR hours of patrol. So, why would the tax-funded patrol provider participate? They would only participate if the SPR firms paid them to. This would be the case only if the information obtained for use in actuarial modeling was worth the cost in reductions in reserves due to better actuarial models, or other savings.

Before proceeding, we must address an important constraint. A business model such as SPR is only viable where subscription density and population density are high enough to warrant the expense of patrol. As the population density decreases, the cost of patrolling a given number of houses grows. As the subscription density decreases, the same problem emerges. This means that in some cases, the demand for patrol services (subscription density) and population density (geographic facts) mean that only 1 firm can operate. For instance, if for a given community, the demand at the offered rate is for 15% of residences and 15% of residences must subscribe for patrol services to be at a profitable level, then only 1 firm will operate in that community. However, if the demand is 20% and 15% is the viability point, then a good number of firms can operate, given the clearinghouse model mentioned above. Since all firms share in the patrol costs pro rata to

exposure, as long as the inefficiencies don't eat too greatly into the 5% gap, then more firms can share the region. Especially since we would expect firms to have overlapping regions, as opposed to strictly co-extensive regions, this assumption is likely to hold.

These arguments easily shut down monopoly concerns that might arise. With the ability of multiple firms to operate in the same geographic region, the standard neoclassical arguments regarding price competition can be deployed without bringing out the big guns of much more subtle Austrian reasoning.

We also hope that these arguments shut down the rarified concerns of Cowen, which Caplan and Stringham have dealt with<sup>39</sup> by defending the distinction between self-enforcing and non-self-enforcing interaction. We hope it is clear to the reader that this business model is collusion-proof and yet also coordination-friendly, *contra* Cowen.

### **Striving to Go out of Business?**

It might be objected that the reason that an SPR couldn't work is that it might work too well, and then, just to save itself, it might not. That is, imagine that an SPR starts business in community A whose demand for services at current pricing is 20%, and the viability of the business is at 15%. Over a few years, the SPR cleans the place up and lower crime rates reduce demand for patrol services to 14%, making the SPR firm operate at a loss. Since that just won't do, the SPR firm lightens up on the patrol, crime rises again, demand rises to 15%, and the SPR firm is again in the black – but, says the critic, at the expense of more crime.

Note that the SPR firm will emerge in communities with effective demand, which means that the communities have both the raw demand for security, and the means to pay for it. In meeting such a need, the SPR firm will only improve the situation. If a socialist believes he can *prove* that the situation can be improved with tax-funded patrol, he is mistaken.

The going-out-of-business story reminds us of another pie-in-the-sky hope: that somehow, we could arrange our affairs so that all crime losses could be compensated to us non-criminals by the criminals themselves. Wisdom informs us that criminals are the least responsible, least productive, and most dysfunctional members of society; and, that they are what some might call a dead-weight loss to society – they impoverish it more than they could possibly enrich it. As such, we must adjust our thinking to the fact that we non-criminals must not only pay for our protection against criminals (locks, guns, dogs, etc.) but we must also insure one another against criminal losses if we wish to remain chrematistically whole, for the criminals haven't the means to fully pay restitution, even if we could find them and hold them to their debts.

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<sup>39</sup> “Networks, Anarcho-Capitalism, and the Paradox of Cooperation” by Bryan Caplan and Edward Stringham, unpublished manuscript, posted in the Working Papers section of mises.org

**Size of SPR Firms**

At this point, it is worthwhile to consider some of the determinants of optimal size. It is obvious that, like all service firms, the SPR model is labor-intensive. As such, its size is severely restricted by what some call the Rule of 150. In organizations as diverse as armies, corporations, churches, and clubs, if a mass of people are to be organized, they can effectively operate in a grouping not exceeding a number somewhere around 150. At this point, management of the group becomes unwieldy for one boss, the organization must be divided somehow, and the group is no longer as cohesive as it was before. In an organization such as patrolmen, cohesion is important.

Other determinants include the response time of patrol officers, which limits to some degree the distance from the dispatch that is feasible; the granularity of support staff, meaning the required ratio of dispatchers, actuaries, lawyers, and general managers to patrol officers; and the somewhat less important (for this case) Rothbard/Reisman limit of internal economic calculation.

Most likely, SPR firms, like most labor-intensive companies that directly serve the public, would develop a standardized set of procedures which would then be replicated in a franchise model. Just like there is Orkin, Terminix, Rentokil, and JohnsonDiversey to fulfill pest needs; and Wendy's, McDonalds, Burger King, and Jack-In-The-Box to fulfill hamburger needs; so would there most likely be several large franchises of SPR firms whose business model would be used around the world, with some local variations.

**Professionalism**

This immediately raises concerns about the quality of labor. In a labor-intensive enterprise, much pressure is on the firm to reduce wages to the minimum necessary to retain the quality of labor sufficient for the satisfaction of the needs of the consumers. However, if the SPR is going to be an institution that can grow in times of crisis, then it must have personnel of high caliber that can assume their new roles when the time is right. Furthermore, day-to-day operation of an SPR firm will require good relations with the tax-funded patrols in the area, and the officers in the tax-funded patrols represent, to some extent, an excellent pool of labor from which to recruit. What must be avoided is the current disdain that many tax-funded patrol officers have for private patrols (the "rent-a-cop" attitude).

Benson<sup>40</sup> points out that a guard whose job it is to simply observe is paid much less than a government policeman, whose job duties are varied and complex. For exactly this reason, we expect that the wage commanded by a patrolman in an SPR firm will be quite high, on par with that of, say, a sheriff's deputy. Consider the duties of the patrol agents and the chief patrol agent:

- Define beats and staffing. Help define serviceable area.
- Know and continually develop company procedures.

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<sup>40</sup> In his *To Serve and Protect*.

- Patrol: observe, remember, record (GPS, camera, voice recorder, PDA)
- Respond to alarms and calls.
- Meet special obligations: integrity check, bring in mail, water and feed pets, etc.
- Be the face of the company; explain our business model and know our pricing structure; give out brochures and/or cards
- Write a daily report: observations, reports of crime in area, new activity, problem kids, suspicious vehicles / people and their descriptions, etc.
- Important qualities: Must be continually cheerful and helpful. Strong and authoritative, but no power trips and long on humility. Service-oriented. Understands and has a continuing interest in patrol theory.
- Hold regular seminar with other patrol officers about patrol theory, lessons learned from the field, etc. Attend industry-wide shows and/or conferences for same. Active member of one or more patrol officer associations.
- Ideally, can also fulfill all the responsibilities of the Investigator.

This last item is important. The wages of an investigator are generally higher than that of a patrolman (\$27.35 vs. \$22.40 mean hourly wages<sup>41</sup>). Whether or not the patrolman will be trained to some degree in dactyloscopy, collection and use of DNA evidence, or footprint analysis, is an open question. But he will certainly have to be familiar with general investigative techniques.

What cannot be avoided, and must be worked on institutionally, is the fact that many patrol officers regard government work to be the most prestigious work, and the higher the level of government, the more prestigious<sup>42</sup>. We can only hope that the success of the SPR firm will affect this notion. To some degree, this already happened after the attacks of 11 September 2001. Anecdotal evidence suggests that those patrolmen leaving the tax-funded sector for security companies have been regarded by their peers as moving up.

### **Partiality**

It has already been defended that there is no reason for an SPR firm to actually be a judge in its own cases (use mediators and/or arbitrators on its own staff for cases in which it is a party). And, unlike government patrol, economic incentives will keep even the appearance of partiality in check.

### **Effectiveness**

Without the expanded power of arrest, or search powers, or seizure powers, all of which are wielded by tax-funded patrolmen, some concern may be expressed regarding the

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<sup>41</sup> BLS data, November 2004 National Occupational Employment and Wage Estimates, codes 33-3021 and 33-3051.

<sup>42</sup> Several police officers we've spoken with regard the Texas Department of Public Safety as more prestigious than the Sheriff's Office or the Constable's Office or the local Police Department. But some officers also wonder why anybody would want to spend most of their careers working accidents and writing traffic tickets.

effectiveness of the SPR company. How could it protect battered spouses and abused children – who may be abused by the client of the SPR?

This first raises the question of who, exactly, the SPR's clients are. Are they all householders in a subscribing household, and are they charged to protect householders from one another? If they were so charged, the intrusiveness so implied would be a PR nightmare. As we have discussed, the tradition even in burglary insurance, is to insure only against non-householder theft.

Now, it may be true that this is not an ideal arrangement, but it must be appreciated that even state-sponsored intrusions into the family has its problems. The SPR firm addresses the problems by involving other voluntary community organizations in the solution of such problems.

On the more general question of whether the power of arrest is a useful tool, there is no doubt that immediate "voluntary compliance" can be achieved by its use. However, the reform of an abusive husband requires therapy, not threats. Similar arguments apply to most other cases.

### **Cooperation Problems**

Why would perpetrators submit to mediation / arbitration? We have suggested above that the growth of the institution of *Notices of Refusal to Arbitrate* would put pressure on perpetrators to arbitrate, which would also flow down to mediation. In many cases, however, parents will put pressure on their delinquent children to undergo mediation or arbitration.

### **On the Home Monitoring Market**

Information in this section comes from IBISWorld Industry Report 56162, Security Systems Services in the US, 6 March 2006, IBISWorld, Inc.

The firms engaged in sales, installation, repair, and monitoring services of burglar and fire alarms and locking systems serve governmental, commercial, and residential sectors. The estimated industry revenue in 2005 was 15.281 billion USD. It has experienced tremendous growth since at least 2000 with real annual growth rates of 6-8%. Expected nominal growth is 4-5% annually for the next 4 years.

Research conducted by the Security Institute of America indicated that in mid-2000, 17.8 percent of residential households had a home security system, 38.8% of households with \$100K+ income had one, and 26.1% of households with \$75-90K income had one. Using residence valuation, the numbers were: 11% for values <\$100K, 21.2% for values \$100-200K, 27.8% for values \$200-300K, and 40.1% for values >\$300K.

The top four important attributes by owners are: fastest response to emergencies, low monitoring fees, trustworthy employees, and customized solutions.

Three-quarters of firms in the industry are small businesses, with 9 or fewer employees. This level of concentration is not expected to change over time. However, there are several major players in the industry:

| <b>Firm</b>    | <b>Market Share</b> | <b>Based in</b>   |
|----------------|---------------------|-------------------|
| Tyco (ADT)     | 22.6%               | Boca Raton, FL    |
| Siemens        | 15.6%               | Buffalo Grove, IL |
| Protection One | 2.2%                | Topeka, KS        |
| Brinks         | 1.9%                | Richmond, VA      |

**Positioning of the SPR firm**

Based on this industry profile, several questions and opportunities are evident.

Will the SPR business model mainly be viewed as complementary or a substitute for home monitoring (HM)? Should the SPR firm also enter the HM field? Should the anarchist entrepreneur consider an insurance-HM model instead of insurance-patrol? What will be the service level of the poor?

It seems clear that special work must be undertaken to modify this business model to capture the low income market. If we use Census Data<sup>43</sup> on household income, use the realtor’s rule of thumb that one can afford a home of 2.5 times annual income, and apply the resulting distributions to the Security Institute of America data on penetration above, we get a sort of demand schedule:

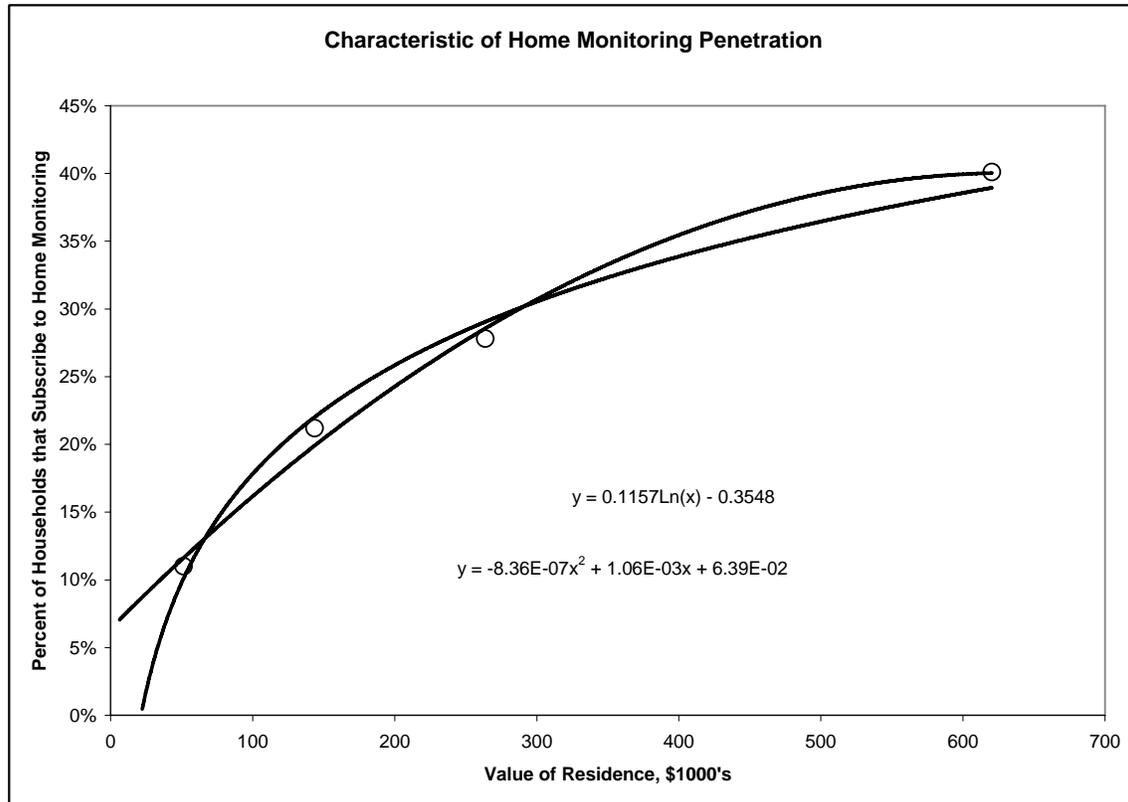
| house value | penetration | avg valuation for range, \$1000 | pct of houses in valuation range | pct of total houses served | pct of total houses unserved in valuation segment |
|-------------|-------------|---------------------------------|----------------------------------|----------------------------|---|
| <100K       | 11.0%       | 51.3                            | 45.0%                            | 5.0%                       | 40.1%   |
| 100-200     | 21.2%       | 143.6                           | 31.0%                            | 6.6%                       | 24.4%   |
| 200-300     | 27.8%       | 263.7                           | 18.0%                            | 5.0%                       | 13.0%   |
| >300K       | 40.1%       | 620.4                           | 6.0%                             | 2.4%                       | 3.6%  |
|             |             | sums                            | 100.0%                           | 18.9% <sup>44</sup>        | 81.1%   |

These points are also graphed below. Two fitted curves are shown through the data, representing optimistic and pessimistic cases extrapolated to low residence valuations.

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<sup>43</sup> Table HINC-06, Income Distribution to \$250,000 or More for Households: 2004, U.S. Census Bureau, Current Population Survey, 2005 Annual Social and Economic Supplement.

<sup>44</sup> This sum compares favorably with the overall number of 17.8%, which lends confidence to this method of analysis.



Even in the optimistic case that the lowest income homes will have a penetration of up to 7%, this may present a difficult hurdle for viability in an SPR model, assuming a similar demand characteristic. It is probably the case that the SPR firm will have to use lower-wage personnel for low-income areas. However, if this hurdle can be overcome, it represents a huge market that has not been accessed by HM, as seen in the table above.

One last point on the HM market: the fact that the industry is dominated by small businesses means that partnering opportunities will be available to explore joint service models between SPR and HM firms.

**Efficient Markets?**

Nowhere have we found, in nearly 4 years of research on the topic, an instance of this business model being tried, or even analyzed by a business.

If this is accurate, it might be wondered why this business model has not been tried by insurance companies, home monitoring companies, or guard/patrol companies. We have already dealt with the fact that the structure of homeowner’s insurance places crime under the radar screen in terms of exposure and potential for enriching the bottom line.

With regard to HM companies, it is important to know that the residential market segment comprises only 15% of their business<sup>45</sup>, and that the major drivers in the rest of the business are technology as a replacement for labor in the security of governmental and corporate clients. Indeed, the resumes of the board of directors of Tyco as presented in its 2005 Annual Report show that they have careers from companies such as Motorola, Verizon, Rohm and Haas, du Pont, and MicroWarehouse. The organization is dedicated to technological solutions, so I suggest that employing patrol labor is the farthest thing from their minds, and not part of either their core competency or their business strategy.

With regard to Guard/Patrol companies, this is a more problematic question. In personal communications with guard companies large and small, we have never found one that does not operate on a cost-plus basis<sup>46</sup>. When these companies' representatives were asked about the patrol-and-restitution model, they explained that such a direction did not appeal to them, since it was not congruent with their business model. Also, with their typically low profit margins – due to intense competition – undertaking a subscription-based model and its inherent uncertainty was too risky. Furthermore, guard/patrol companies are started up and staffed primarily by former government patrol officers. As such, it is postulated that their experience establishes a mindset that government patrol is fundamental and private patrol is merely supplemental. When these companies' representatives were told about this business model, they were curious and had never even considered such a thing.

The conclusion we tentatively draw is that SPR companies will have to be created from scratch, since none of the similar lines are likely to undertake and try the business model.

### **Primary Market Research Pilot**

As suggested by Adams<sup>47</sup>, no entrepreneur worth his salt goes long without seeking direct input from consumers to probe “pain in the area” and elicit “market validation”.

We devised a market research questionnaire based on the principles found in texts by Zaltman<sup>48</sup>, Brace<sup>49</sup>, McQuarrie<sup>50</sup>, and Blankenship<sup>51</sup>, with most of the practical advice coming from Brace.

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<sup>45</sup> Again, from IBISWorld, Inc.

<sup>46</sup> In 2003, Gil contacted several guard/patrol companies in Houston to discuss this business model with them. Most of the conversations centered around potential buyouts, joint ventures, or a startup SPR business outsourcing its patrol function to their companies.

<sup>47</sup> *A Good Hard Kick in the Ass: Basic Training for Entrepreneurs* by Rob Adams, Crown Business, New York, 2002. Rob Adams is a prominent Austin-based venture capitalist and entrepreneur.

<sup>48</sup> *How Customers Think: Essential Insights into the Mind of the Market* by Gerald Zaltman, Harvard Business School Press, 2003.

<sup>49</sup> *Questionnaire Design: How To Plan, Structure And Write Survey Material For Effective Market Research* (Market Research in Practice Series) by Ian Brace, Kogan Page, 2004.

<sup>50</sup> *The Market Research Toolbox: A Concise Guide for Beginners* by Edward F. McQuarrie, Sage Publications, Inc.; 2nd edition, 2005.

<sup>51</sup> *State of The Art Marketing Research* by Albert Blankenship, McGraw-Hill; 2nd edition, 1998.

The full text of the questionnaire can be found in the Appendix. Question numbers and coding information did not appear on the copies of pages that were given to interviewees.

Interviews were solicited door-to-door on weekend days between 10 a.m. and 5 p.m. at residences where a home-monitoring sign was present in the yard. Interviews were recorded on a digital voice recorder<sup>52</sup>. There were some portions of the survey that were presented for the interviewees to complete in writing. Results were tabulated in spreadsheets, and these results are in the Appendix.

We experienced the following:

| Date                               | 4-Feb-06 | 11-Feb-06 | 18-Feb-06 | Total |
|------------------------------------|----------|-----------|-----------|-------|
| Number of door knocks              | 20       | 28        | 54        | 102   |
| Number of answers                  | 12       | 12        | 18        | 42    |
| Number agreeing to be interviewed  | 2        | 5         | 2         | 9     |
| Number passing screening questions | 1        | 4         | 1         | 6     |
| Number of completed interviews     | 1        | 3         | 0         | 4     |

### Chief Results

The main reason for conducting a pilot of a questionnaire is to refine the questionnaire, not reach marketing conclusions. However, even with a very small sample, there can be considerable homogeneity and significant things can be learned. For instance, Zaltman claims that with his metaphor elicitation interview technique, 15 completed interviews are all that are required to complete a “consensus map” of the feelings, projects, and associations that tie a product or service to the lives of its consumers. Also, the subtle understanding that comes from actually talking to an interviewee, and watching and listening while they respond, delivers far more information than can be communicated on interview forms. This is one of the reasons that Adams insists that the staff of a startup company conduct marketing research themselves. Lastly, the extremely low response rate to marketing questionnaires introduces the very real problem of self-selection bias, which 10 or 100 times the number of completed interviews cannot contravene. Nonetheless, we think some valuable things have been learned about the questionnaire *and* the business model. Let’s go:

- False alarms and fees from the Sheriff’s department do not appear to be on the radar screen of consumers (Q10-12). This is a major source of pain for the Sheriff’s department, as it accounts for about 11% of total calls to the Montgomery County Sheriff’s Dispatcher.
- Consumers are often nudged into subscribing to home monitoring, either through company contact, a friend or relative suggesting it, or purchasing a house with a monitoring system installed (Q14)
- Small children and an empty house are the key motivators (Q16, 28)

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<sup>52</sup> These interviews are available in MP3 format upon request to the corresponding author.

- Consumers do not perceive crime rates as higher than their neighbors – that is not their motivation (Q19, 20)
- Consumers think that the amount of government patrol is low to about right, and they rate its effectiveness as about a 3.8 on 5-point scale (Q21, 22)
- There is a correlation between consumers’ rating of the perceived effectiveness of local government investigations of burglaries and expected likelihood of government agents recovering burgled property, but the same does not apply to vandalism (Q24-27)
- There is no correlation between the perceived effectiveness of government patrol or investigation and propensity to report an expectation of subscribing SPR (Q21, 22, 25-27, 42, demand curve answers)
- Consumers resoundingly want more patrol (Q21, 34)
- Consumers see the lion’s share of the SPR business model’s value in patrol (43% avg), with restitution being second (20% avg). (Q36-40)
- The offer as presented seems to be “worth” about \$25/mo to consumers. (Q41)
- Consumers see the SPR model as a complement to, not a substitution for home monitoring, especially at price points at or below \$25/mo<sup>53</sup>. (demand curve answers)
- Consumers resoundingly claim to not be affected by free riding effects in this offer (Q43)
- SPR fared well on the Barnett taxonomy-style questions, but there were no consistently exciting or worrisome answers (Q44-82)

It was hypothesized that two factors might impact the propensity of a homeowner to subscribe to home monitoring: one we term the subscription factor, the other the do-it-yourself (DIY) factor. The subscription factor: some are reticent to commit to a monthly payment of any sort (cable TV, cell phone, etc.) because of the psychological and fiscal impact – considered an albatross by some. The DIY factor: if you DIY in other areas of your life, why not security, too?

- Consumers subscribe to an average of 5.5 other subscription services. We have no point of comparison for this, yet. (Q86-95)
- Consumers have an average “DIY score” of 0.6 and most also have a gun in the home for security. The DIY hypothesis seems to be DOA. (Q30-32, 96-118)

Regarding the questionnaire:

- Questions on false alarms can be eliminated
- Probe more deeply on motivations to have security
- Eliminate the questions on crime rates – no major action there

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<sup>53</sup> Care must be taken with these reported numbers. The well-known phenomena of social desirability bias (SDB) is that interviewees will often report that they will do something that is socially desirable, such as donate to charity, when, in fact, they will not do that thing. Further, there is a double-edged sword in conducting face-to-face interviews. While more can be learned, interviewees are more likely to want to please the interviewer with positive answers in a face-to-face encounter, introducing further bias. In our case, we expect that both of these biases could have played a role.

- Eliminate the Barnettian questions – no major action there
- Eliminate the questions on DIY – that hypothesis is not proving out

## Conclusions and Future Work

We have shown in this paper that the SPR business model is bearing out as feasible and perhaps commercially viable – no “stoppers” have been found. In particular:

- The free riding problem is solved by tying restitution to patrol
- There are clear paths for future expansion of business scope
- Multiple firms using this model could cooperate but not have extraordinary incentives to collude
- The complexity of labor will attract high-quality patrol staff
- There are no extraordinary prima facie concerns by consumers of home monitoring services

Immediate future work will concentrate on marketing research. We intend to revise the questionnaire and then undertake a larger sample. We are also intrigued by Zaltman’s metaphor elicitation technique to construct a “consensus map”, and will attempt to do so.

Another future paper should deal with the cost model, including a discussion of actuarial costs and patrol costs. Patrol costs are the more problematic area, since patrol costs per subscriber (for a given standard of coverage) depend upon market penetration.

For us, this is an ongoing project. We are eager to hear from any reader with comments or criticisms. If you would like to be involved in the project, please contact the corresponding author.

## **Appendix**

Overleaf are:

1. Marketing Research Questionnaire with question numbering and coding notes (9 pages).
2. Questionnaire Consumables, meaning those pages that were presented to the interviewee for reading or written completion (5 pages).
3. Pilot Questionnaire Results (3 11x17 pages)
4. Demand Curve Answers (1 page)
5. Interview notes (1 page)

**Introduction**

Good morning. I am Gil Guillory. GIVE CARD. I live here in The Woodlands. I am carrying out a survey about security. The interview will take, at most, about 10 minutes to complete. All information is confidential, and will be used for research purposes only. Could you please help?

**Screening**

1. Do you subscribe to a home monitoring service, such as ADT, Brinks, or Honeywell?

ONLY IF NO:

2. Have you ever subscribed to a home monitoring service?

IF NO TO BOTH – TERMINATE AND THANK.

3. Are you, or is a family member, a policeman, constable, or sheriff's deputy?

IF YES – TERMINATE AND THANK.

**Experience with Monitoring and Factors important in Choosing Monitoring**

4. What company does your monitoring?

5. How much do you pay per month for monitoring?

6. How long have you had it?

7. To what features do you subscribe?

Burglary, fire, CO, emergency response, other

8. Have you ever had a break-in, or a positive alarm?

IF YES: 9. Please describe.

10. Have you had any false alarms?

IF YES: 11. Please describe.

12. Have you ever been charged a fee from the Sheriff's Department for a false alarm?

IF YES: 13. How much? Please describe the experience.

14. Please tell me the story of how you subscribed to home monitoring.

PROBE FOR THESE DETAILS:

Who contacted whom (company or consumer)

Why contact was made, if by consumer

Who in household originated, consulted, made decision

15. What feature or features do you most like about your monitoring system?

16. Do you think there is something about your home environment that makes monitoring especially valuable?

A. perception / actual crime risk

B. children / small children

C. old/frail/handicapped householder

D. house empty often (work, empty nest, travel)

E. other

17. By having home monitoring, what events or circumstances are you most glad you have avoided?

**Perceived value of government patrol**

18. When did you last see a government patrol car in your area?

19. Thinking about crime rates in your area, do you think they are:

- A. 5 - Very high for this type of neighborhood
- B. 4 - Somewhat high for this type of neighborhood
- C. 3 - About average for this type of neighborhood
- D. 2 - Somewhat low for this type of neighborhood
- E. 1 - Very low for this type of neighborhood

20. Thinking about how others in the community think, do you think crime rates are:

- A. 5 - Much higher than what most people think
- B. 4 - Somewhat higher than what most people think
- C. 3 - About what most people think
- D. 2 - Somewhat lower than what most people think
- E. 1 - Much lower than what most people think

21. Thinking about the amount of government patrol in your area, do you think it is:

- A. 5 - Too much for this type of neighborhood
- B. 4 - Somewhat high for this type of neighborhood
- C. 3 - About right for this type of neighborhood
- D. 2 - Somewhat low for this type of neighborhood
- E. 1 - Too low for this type of neighborhood

Rating on a 0 to 5 scale, how effective is the local government at:

- 22. Deterring crime through patrols
- 23. Response to calls or alarms
- 24. Quality of Investigation of a burglary or vandalism

Rating as a percentage, if a burglary or vandalism occurred at your home, what are:

- 25. Likelihood of government agents catching a burglar or vandal
- 26. Likelihood of government agents recovering property from a burglary
- 27. Likelihood of government agents getting a vandal to pay for damage

**Pain in the area of security**

28. What are the main concerns you have about the security of your home?

PROBE ON THESE TOPICS:

Children, wife, pets, computer, TV, jewelry

29. Thinking of the security of your home, what unsolved problems do you have?

PROBE ON THESE TOPICS:

Restitution, justice, deterrence, crime reports

30. Which of the following security measures do you have in or on your home?

- A. dog
- B. motion-actuated lights
- C. deadbolts on doors
- D. gun
- E. other (list)

IF GUN IN HOME, 31. Do you have or use your gun for purposes other than home security?

IF YES, 32. LIST.

IF NO GUN IN HOME, 33. Why don't you have a gun in the home?

- A. too dangerous / fear of misfire
- B. don't know how to handle a gun
- C. too expensive
- D. too much hassle / time to get gun and license
- E. haven't gotten around to it
- F. not necessary
- G. division of labor – cops or others should wield guns
- H. other

34. What would you like security specialists – in either government or industry – to know about your security needs?

PROBE: Is there anything else?

**Perceived value of subscription patrol**

I would now like to show you an offer from a new type of business. GIVE CARD.

For a paid monthly subscription, this company offers a bundle of benefits: they patrol the neighborhood around your house to deter crime; they send you a report every month telling you what crimes have been committed in your area; if you subscribe to a monitoring service and choose them as the first-responder, they are guaranteed to beat the mean response time of the Sheriff's department; if a crime occurs on your property, they investigate and take any necessary forensic evidence; if they locate the perpetrator, they work to engage him in mediation or arbitration to compensate you; if they fail to do that, they compensate you for stolen goods and damage to your property up to the point where your homeowner's insurance takes over, covering your deductible.

35. Do you have any questions about this business offer?

ANSWER ANY QUESTIONS BRIEFLY

Using points totaling 100, please allocate points to each component of this offer to indicate its contribution to the total value of the business offer.

- 36. Patrol
- 37. Crime Reports
- 38. Investigation
- 39. Mediation / Arbitration
- 40. Restitution

41. How much would you expect to pay for this service?

42. If this service were priced the same as your home monitoring service, do you think you would:

- A. subscribe to both
- B. subscribe only to home monitoring
- C. subscribe only to patrol and restitution

**Appendix 1**

Gil Guillory and Brian Drake

For each of the price points below, please indicate to which services you would most likely subscribe:

| Patrol and Restitution Costs | Subscribe to Patrol and Restitution Only | Subscribe to Home Monitoring Only | Subscribe to Both |
|------------------------------|--|-----------------------------------|-------------------|
| \$5 / mo.                    |  |                                   |                   |
| \$10 / mo.                   |  |                                   |                   |
| \$15 / mo.                   |  |                                   |                   |
| \$20 / mo.                   |  |                                   |                   |
| \$25 / mo.                   |  |                                   |                   |
| \$30 / mo.                   |  |                                   |                   |
| \$35 / mo.                   |  |                                   |                   |
| \$40 / mo.                   |  |                                   |                   |
| \$45 / mo.                   |  |                                   |                   |
| \$50 / mo.                   |  |                                   |                   |
| Price point voiced above     |  |                                   |                   |
|                              |  |                                   |                   |

43. Thinking about this business offer, *imagine that the offer were priced such that you would subscribe*. Now, one of your neighbors subscribes, so that you would get the benefit of patrol regardless of whether you subscribed or not. Subscribing would give you the benefits of guaranteed response time, crime reports, investigation, mediation/arbitration, and restitution. How would this situation affect your likelihood of subscribing?

- A. 3 - Given that my neighbor subscribes, I would not subscribe
- B. 2 - Given that my neighbor subscribes, it would greatly reduce my likelihood of subscribing
- C. 1 - Given that my neighbor subscribes, it would slightly reduce my likelihood of subscribing
- D. 0 - Given that my neighbor subscribes, I would still subscribe

**Appendix 1**

Gil Guillory and Brian Drake

**Worries/fears/econ arguments wrt govt patrol, home monitoring, and patrol and restitution**

For the following questions, an argument or statement will be given. For the three security providers we've discussed (government, home monitoring, and patrol and restitution), I'd like you to rate on a scale of 0 to 5 how applicable or important or true each statement is.

|  |                           |                                |                                       |
|--|---------------------------|--------------------------------|---------------------------------------|
| 44-46. I can't tell who the good guys and the bad guys are | government<br>0-1-2-3-4-5 | home monitoring<br>0-1-2-3-4-5 | patrol and restitution<br>0-1-2-3-4-5 |
| 47-49. They don't know who's right or wrong                | government<br>0-1-2-3-4-5 | home monitoring<br>0-1-2-3-4-5 | patrol and restitution<br>0-1-2-3-4-5 |
| 50-52. They favor their own                                | government<br>0-1-2-3-4-5 | home monitoring<br>0-1-2-3-4-5 | patrol and restitution<br>0-1-2-3-4-5 |
| 53-55. They provide an excellent deterrent against crime   | government<br>0-1-2-3-4-5 | home monitoring<br>0-1-2-3-4-5 | patrol and restitution<br>0-1-2-3-4-5 |
| 56-58. They can't be impartial                             | government<br>0-1-2-3-4-5 | home monitoring<br>0-1-2-3-4-5 | patrol and restitution<br>0-1-2-3-4-5 |
| 59-61. They don't have an incentive to protect my property | government<br>0-1-2-3-4-5 | home monitoring<br>0-1-2-3-4-5 | patrol and restitution<br>0-1-2-3-4-5 |
| 62-64. They're professional                                | government<br>0-1-2-3-4-5 | home monitoring<br>0-1-2-3-4-5 | patrol and restitution<br>0-1-2-3-4-5 |
| 65-67. Their service is too expensive for what's delivered | government<br>0-1-2-3-4-5 | home monitoring<br>0-1-2-3-4-5 | patrol and restitution<br>0-1-2-3-4-5 |
| 68-70. I'll not be compensated for a criminal loss         | government<br>0-1-2-3-4-5 | home monitoring<br>0-1-2-3-4-5 | patrol and restitution<br>0-1-2-3-4-5 |
| 71-73. They could make an error that harms me              | government<br>0-1-2-3-4-5 | home monitoring<br>0-1-2-3-4-5 | patrol and restitution<br>0-1-2-3-4-5 |
| 74-76. They care   | government<br>0-1-2-3-4-5 | home monitoring<br>0-1-2-3-4-5 | patrol and restitution<br>0-1-2-3-4-5 |
| 77-79. They won't catch the criminal                       | government<br>0-1-2-3-4-5 | home monitoring<br>0-1-2-3-4-5 | patrol and restitution<br>0-1-2-3-4-5 |
| 80-82. Some of them are on power trips                     | government<br>0-1-2-3-4-5 | home monitoring<br>0-1-2-3-4-5 | patrol and restitution<br>0-1-2-3-4-5 |

**Close/Demographics**

Just to close out the survey, there are a few general questions:

83. What are the ages and sexes of the members of your household?

LIST ALL

84. What is your household income?

85. Is any member of your member handicapped or frail?

To which of the following do you subscribe?

- A. 86. Cell phone
- B. 87. Newspaper
- C. 88. Cable or satellite TV
- D. 89. Lawn service
- E. 90. Maid or cleaning service
- F. 91. Pest control service
- G. 92. Dialup internet
- H. 93. Broadband internet
- I. 94. VOIP telephone service
- J. 95. Traditional land line telephone service

96. Do you change your own oil, or do you pay someone to do it?

97. Do you wash your own car, or do you pay someone to do it?

98. Thinking about household repairs in this house, which of these have been done?

| Item                                     | YES? | DIY? |
|--|------|------|
| Replace water heater                     | 99   | 100  |
| Install new flooring or tile             | 101  | 102  |
| Install new sink or toilet               | 103  | 104  |
| Repair toilet                            | 105  | 106  |
| Repair wall / drywall                    | 107  | 108  |
| Install new light fixture or ceiling fan | 109  | 110  |
| Paint exterior of house                  | 111  | 112  |
| Refinish or refurbish furniture          | 113  | 114  |
| Paint an interior room                   | 115  | 116  |
| Install closet organizer                 | 117  | 118  |

Thank you for visiting with us today. We would like to continue this conversation and learn more about your family's security needs. Would you be willing to speak with us again in a couple weeks?

IF YES:

Great. The next interview will involve a technique called metaphor elicitation. We will look at images together and discuss them. It is an open-ended process that lets us explore ideas and connections among ideas. When would be a good time for that?

THANK AND TERMINATE.

Thinking about crime rates in your area, do you think they are:

- A. Very high for this type of neighborhood
- B. Somewhat high for this type of neighborhood
- C. About average for this type of neighborhood
- D. Somewhat low for this type of neighborhood
- E. Very low for this type of neighborhood

Thinking about how others in the community think, do you think crime rates are:

- A. Much higher than what most people think
- B. Somewhat higher than what most people think
- C. About what most people think
- D. Somewhat lower than what most people think
- E. Much lower than what most people think

Thinking about the amount of government patrol in your area, do you think it is:

- A. Too much for this type of neighborhood
- B. Somewhat high for this type of neighborhood
- C. About right for this type of neighborhood
- D. Somewhat low for this type of neighborhood
- E. Too low for this type of neighborhood

Rating on a 0 to 5 scale, how effective is the local government at:

- 0-1-2-3-4-5    Deterring crime through patrols
- 0-1-2-3-4-5    Response to calls or alarms
- 0-1-2-3-4-5    Quality of Investigation of a burglary or vandalism

Rating as a percentage, if a burglary or vandalism occurred at your home, what is:

- \_\_\_\_\_ Likelihood of government agents catching a burglar or vandal
- \_\_\_\_\_ Likelihood of government agents recovering property from a burglary
- \_\_\_\_\_ Likelihood of government agents getting a vandal to pay for damage

# Woodlands Patrol and Restitution

## Our Monthly Subscription Service Provides These Customer Benefits:

### We Deter Crime

Daily Patrol of the neighborhood around your house

### We Report Crime

Monthly newsletter detailing crimes committed in your area

### We Respond to Alarms

Choose us as your monitoring service's first responder:

We will beat the mean response time of the Sheriff's Department –  
guaranteed (money back for that month)

### Total Crime Solution

If a crime occurs on your property:

1. We investigate, taking statements and any necessary forensic evidence
2. We locate the perpetrator
3. We engage the perpetrator in mediation or arbitration to return your goods and/or get you compensation
4. If we can't get you compensation from the perpetrator, ***we will compensate you for stolen goods and damage up to the deductible on your homeowner's policy.***

Using points totaling 100, please allocate points to each component of this offer to indicate its contribution to the total value of the business offer.

\_\_\_\_\_ Patrol

\_\_\_\_\_ Crime Reports

\_\_\_\_\_ Investigation

\_\_\_\_\_ Mediation / Arbitration

\_\_\_\_\_ Restitution

**Appendix 2**

Gil Guillory and Brian Drake

For each of the price points below, please indicate to which services you would most likely subscribe:

| Patrol and Restitution Costs | Subscribe to Patrol and Restitution Only | Subscribe to Home Monitoring Only | Subscribe to Both |
|------------------------------|--|-----------------------------------|-------------------|
| \$5 / mo.                    |  |                                   |                   |
| \$10 / mo.                   |  |                                   |                   |
| \$15 / mo.                   |  |                                   |                   |
| \$20 / mo.                   |  |                                   |                   |
| \$25 / mo.                   |  |                                   |                   |
| \$30 / mo.                   |  |                                   |                   |
| \$35 / mo.                   |  |                                   |                   |
| \$40 / mo.                   |  |                                   |                   |
| \$45 / mo.                   |  |                                   |                   |
| \$50 / mo.                   |  |                                   |                   |
| other                        |  |                                   |                   |
|                              |  |                                   |                   |

Thinking about this business offer, *imagine that the offer were priced such that you would subscribe*. Now, one of your neighbors subscribes, so that you would get the benefit of patrol regardless of whether you subscribed or not. Subscribing would give you the benefits of guaranteed response time, crime reports, investigation, mediation/arbitration, and restitution. How would this situation affect your likelihood of subscribing?

- A. Given that my neighbor subscribes, I would not subscribe
- B. Given that my neighbor subscribes, it would greatly reduce my likelihood of subscribing
- C. Given that my neighbor subscribes, it would slightly reduce my likelihood of subscribing
- D. Given that my neighbor subscribes, I would still subscribe

**Appendix 2**

Gil Guillory and Brian Drake

For the following questions, an argument or statement will be given. For the three security providers we've discussed (government, home monitoring, and patrol and restitution), I'd like you to rate on a scale of 0 to 5 how applicable or important or true each statement is.

|   |                           |                                |                                       |
|---|---------------------------|--------------------------------|---------------------------------------|
| I can't tell who the good guys and the bad guys are | government<br>0-1-2-3-4-5 | home monitoring<br>0-1-2-3-4-5 | patrol and restitution<br>0-1-2-3-4-5 |
| They don't know who's right or wrong                | government<br>0-1-2-3-4-5 | home monitoring<br>0-1-2-3-4-5 | patrol and restitution<br>0-1-2-3-4-5 |
| They favor their own                                | government<br>0-1-2-3-4-5 | home monitoring<br>0-1-2-3-4-5 | patrol and restitution<br>0-1-2-3-4-5 |
| They provide an excellent deterrent against crime   | government<br>0-1-2-3-4-5 | home monitoring<br>0-1-2-3-4-5 | patrol and restitution<br>0-1-2-3-4-5 |
| They can't be impartial                             | government<br>0-1-2-3-4-5 | home monitoring<br>0-1-2-3-4-5 | patrol and restitution<br>0-1-2-3-4-5 |
| They don't have an incentive to protect my property | government<br>0-1-2-3-4-5 | home monitoring<br>0-1-2-3-4-5 | patrol and restitution<br>0-1-2-3-4-5 |
| They're professional                                | government<br>0-1-2-3-4-5 | home monitoring<br>0-1-2-3-4-5 | patrol and restitution<br>0-1-2-3-4-5 |
| Their service is too expensive for what's delivered | government<br>0-1-2-3-4-5 | home monitoring<br>0-1-2-3-4-5 | patrol and restitution<br>0-1-2-3-4-5 |
| I'll not be compensated for a criminal loss         | government<br>0-1-2-3-4-5 | home monitoring<br>0-1-2-3-4-5 | patrol and restitution<br>0-1-2-3-4-5 |
| They could make an error that harms me              | government<br>0-1-2-3-4-5 | home monitoring<br>0-1-2-3-4-5 | patrol and restitution<br>0-1-2-3-4-5 |
| They care   | government<br>0-1-2-3-4-5 | home monitoring<br>0-1-2-3-4-5 | patrol and restitution<br>0-1-2-3-4-5 |
| They won't catch the criminal                       | government<br>0-1-2-3-4-5 | home monitoring<br>0-1-2-3-4-5 | patrol and restitution<br>0-1-2-3-4-5 |
| Some of them are on power trips                     | government<br>0-1-2-3-4-5 | home monitoring<br>0-1-2-3-4-5 | patrol and restitution<br>0-1-2-3-4-5 |

Pilot Questionnaire Results

On the viability of subscription patrol and restitution services  
by Gil Guillory and Brian Drake

| question   | coding notes | 1-1                                       | 2-1                                      | 2-2                            | 2-3                                  | 2-4   | sum | avg     |
|--|--------------|---|--|--------------------------------|--------------------------------------|---|-----|---------|
| 1. Do you subscribe to a home monitoring service, such as ADT, Brinks, or Honeywell?                       | 1=yes, 0=no  | 1   | 1  | 0                              | 1                                    | 1   |     |         |
| 2. Have you ever subscribed to a home monitoring service?  | 1=yes, 0=no  | 1   | 1  | 1                              | 1                                    | 1   |     |         |
| 3. Are you, or is a family member, a policeman, constable, or sheriff's deputy?                            | 1=yes, 0=no  | 0   | 0  | 0                              | 0                                    | 0   |     |         |
| 4. What company does your monitoring?  |              | Brinks                                    | Brinks                                   | Ranger                         | Safe                                 | Brinks  |     |         |
| 5. How much do you pay per month for monitoring?   |              | \$50.00                                   | ?  | \$100.00                       | \$17.50                              | \$25.00   |     | \$47.50 |
| 6. How long have you had it?   | yrs          | 1   | ?  | 2                              | 7                                    | 1   |     | 2.75    |
| 7. To what features do you subscribe?  |              | burglary, fire, CO                        | burglary, fire, CO                       | everything                     | burglary, EMS                        | all of it   |     |         |
| 8. Have you ever had a break-in, or a positive alarm?  | 1=yes, 0=no  | 1   | 0  | 0                              | 0                                    | 0   | 1   |         |
| IF YES: 9. Please describe.  |              | 20 years ago, \$15k worth of goods stolen | n/a                                      | n/a                            | n/a                                  | n/a   |     |         |
| 10. Have you had any false alarms?   | 1=yes, 0=no  | 0   | 0  | 0                              | 1                                    | 0   | 1   |         |
| IF YES: 11. Please describe.   |              | n/a                                       | n/a                                      | n/a                            | set off himself                      | n/a   |     |         |
| 12. Have you ever been charged a fee from the Sheriff's Department for a false alarm?                      | 1=yes, 0=no  | 0   | 0  | 0                              | 0                                    | 0   | 0   |         |
| IF YES: 13. How much? Please describe the experience.  |              | n/a                                       | n/a                                      | n/a                            | n/a                                  | n/a   |     |         |
| 14. Please tell me the story of how you subscribed to home monitoring.                                     |              | got it when daughter did                  | husband passed away, gone during the day | came with house                | someone gave him security co. tel. # | Brinks contacted; reduce homeowner's insurance monitoring, esp. when gone |     |         |
| 15. What feature or features do you most like about your monitoring system?                                |              | "automatic stuff"                         | "I like the package."                    | "We were gone quite a bit."    |                                      |   |     |         |
| 16. Do you think there is something about your home environment that makes monitoring especially valuable? | 1=yes, 0=no  |   |  |                                |                                      |   |     |         |
| A. perception / actual crime risk  |              | 0   | 0  | 0                              | 1                                    | 0   | 1   |         |
| B. children / small children   |              | 1   | 1  | 0                              | 0                                    | 1   | 3   |         |
| C. old/frail/handicapped householder   |              | 1   | 0  | 0                              | 1                                    | 0   | 2   |         |
| D. house empty often (work, empty nest, travel)  |              | 0   | 1  | 1                              | 0                                    | 1   | 3   |         |
| 17. By having home monitoring, what events or circumstances are you most glad you have avoided?            |              | more break-ins                            | worries                                  | "Can't say anything positive." |                                      | - fires (old wiring in house)   |     |         |
| 18. When did you last see a government patrol car in your area?  |              | yesterday                                 | today (every day)                        | two days ago                   | "It's been some time."               | every day (live on street)  |     |         |
| 19. Thinking about crime rates in your area, do you think they are:  | 1-5          | 3   | 2  | 3                              | 2                                    | 1   |     | 2.2     |
| 20. Thinking about how others in the community think, do you think crime rates are:                        | 1-5          | 4   | 2  | 4                              | 2                                    | 1   |     | 2.6     |
| 21. Thinking about the amount of government patrol in your area, do you think it is:                       | 1-5          | 1   | 3  | 3                              | 1                                    | 3   |     | 2.2     |
| 22. Deterring crime through patrols  | 0-5          | 3   | 5  | 3                              | 3                                    | 5   |     | 3.8     |
| 23. Response to calls or alarms  | 0-5          | 4   | 3  | NR                             | 5                                    | 5   |     | 4.3     |
| 24. Quality of Investigation of a burglary or vandalism  | 0-5          | 3   | 5  | NR                             | 3                                    | 4   |     | 3.8     |
| 25. Likelihood of government agents catching a burglar or vandal   | 0-100        | 50  | 100                                      | 70                             | 0                                    | 60  |     | 56      |
| 26. Likelihood of government agents recovering property from a burglary                                    | 0-100        | 0   | 100                                      | 50                             | 25                                   | 60  |     | 47      |
| 27. Likelihood of government agents getting a vandal to pay for damage                                     | 0-100        | 40  | 80                                       | 20                             | 0                                    | 0   |     | 28      |
| 28. What are the main concerns you have about the security of your home?                                   |              | when gone                                 | children, family                         | children                       | when gone                            | children  |     |         |
| 29. Thinking of the security of your home, what unsolved problems do you have?                             |              | none – has dog                            | crime reports                            | none                           | none                                 | too much police presence in LA  |     |         |
| 30. Which of the following security measures do you have in or on your home?                               |              |   |  |                                |                                      |   |     |         |
| A. dog   |              | 1   | 0  | 1                              | 1                                    | 0   | 3   |         |
| B. motion-actuated lights  |              | 1   | 1  | 1                              | 1                                    | 1   | 5   |         |
| C. deadbolts on doors  |              | 1   | 1  | 1                              | 1                                    | 1   | 5   |         |
| D. gun   |              | 1   | 0  | 1                              | 1                                    | 0   | 3   |         |
| IF GUN IN HOME, 31. Do you have or use your gun for purposes other than home security?                     | 1=yes, 0=no  | 1   | n/a                                      | 0                              | 0                                    | n/a   |     |         |
| IF YES, 32. LIST.  |              | hunting                                   | n/a                                      | n/a                            | n/a                                  |   |     |         |
| IF NO GUN IN HOME, 33. Why don't you have a gun in the home?   |              |   |  |                                |                                      | "old felony conviction"   |     |         |
| A. too dangerous / fear of misfire   |              |   |  |                                |                                      |   |     | 0       |
| B. don't know how to handle a gun  |              |   | 1  |                                |                                      |   |     | 1       |
| C. too expensive   |              |   |  |                                |                                      |   |     | 0       |
| D. too much hassle / time to get gun and license   |              |   |  |                                |                                      |   | 1   | 1       |
| E. haven't gotten around to it   |              |   |  |                                |                                      |   |     | 0       |
| F. not necessary   |              |   |  |                                |                                      |   |     | 0       |
| G. division of labor – cops or others should wield guns  |              |   | 1  |                                |                                      |   |     | 1       |

Pilot Questionnaire Results

On the viability of subscription patrol and restitution services  
by Gil Guillory and Brian Drake

| question   | coding notes  | 1-1                  | 2-1                      | 2-2              | 2-3   | 2-4                                  | sum | avg     |
|--|---------------|----------------------|--------------------------|------------------|---|--------------------------------------|-----|---------|
| 34. What would you like security specialists – in either government or industry – to know about your security needs? |               | need high visibility | kids in home             | more visibility  | pick up newspapers and trashcans, invitation to crime; more patrols | “More cops, I guess, would be nice.” |     |         |
| 35. Do you have any questions about this business offer?   | 0=no, or list | 0                    | How much?                | 0                | 0   | Private security?                    |     |         |
| 36. Patrol   | 0-100         | did                  | 50                       | TERMINATED EARLY | 50  | 30                                   |     | 43      |
| 37. Crime Reports  | 0-100         | not                  | 5                        |                  | 15  | 20                                   |     | 13      |
| 38. Investigation  | 0-100         | divide               | 10                       |                  | 15  | 20                                   |     | 15      |
| 39. Mediation / Arbitration  | 0-100         | points               | 5                        |                  | 10  | 10                                   |     | 8       |
| 40. Restitution  | 0-100         | up                   | 30                       |                  | 10  | 20                                   |     | 20      |
|  | sum           |                      |                          |                  |   |                                      |     |         |
| 41. How much would you expect to pay for this service?   |               | 25                   | 25                       |                  | would not say   | \$25.00                              |     | \$25.00 |
| 42. If this service were priced the same as your home monitoring service, do you think you would:                    | BOTH, HM, P&R | both                 | both                     |                  | HM  | P&R                                  |     |         |
| 43. Thinking about this business offer...How would this situation affect your likelihood of subscribing?             | 0-3           | 0                    | 0                        |                  | 3   | 0                                    |     | 0.75    |
| 44. I can't tell who the good guys and the bad guys are G  | 0-5           | 3                    | 4                        |                  | 0   | 3                                    |     | 2.5     |
| 45. I can't tell who the good guys and the bad guys are HM   | 0-5           | 3                    | 3                        |                  | 0   | 2                                    |     | 2.0     |
| 46. I can't tell who the good guys and the bad guys are P&R  | 0-5           | 3                    | 3                        |                  | 3   | 2                                    |     | 2.8     |
| 47. They don't know who's right or wrong G   | 0-5           | 3                    | 3                        |                  | 5   | 2                                    |     | 3.3     |
| 48. They don't know who's right or wrong HM  | 0-5           | 3                    | 3                        |                  | 5   | 1                                    |     | 3.0     |
| 49. They don't know who's right or wrong P&R   | 0-5           | 1                    | 3                        |                  | 5   | 1                                    |     | 2.5     |
| 50. They favor their own G   | 0-5           | 5                    | 4                        |                  | 3   | 5                                    |     | 4.3     |
| 51. They favor their own HM  | 0-5           | 3                    | 4                        |                  | 4   | 3                                    |     | 3.5     |
| 52. They favor their own P&R   | 0-5           | 3                    | 4                        |                  | 3   | 1                                    |     | 2.8     |
| 53. They provide an excellent deterrent against crime G  | 0-5           | 2                    | 5                        |                  | 3   | 4                                    |     | 3.5     |
| 54. They provide an excellent deterrent against crime HM   | 0-5           | 4                    | 5                        |                  | 5   | 5                                    |     | 4.8     |
| 55. They provide an excellent deterrent against crime P&R  | 0-5           | 3                    | 5                        |                  | 3   | 5                                    |     | 4.0     |
| 56. They can't be impartial G  | 0-5           | 3                    | 5                        |                  | 5   | 2                                    |     | 3.8     |
| 57. They can't be impartial HM   | 0-5           | 3                    | 5                        |                  | 5   | 1                                    |     | 3.5     |
| 58. They can't be impartial P&R  | 0-5           | 3                    | 5                        |                  | 3   | 1                                    |     | 3.0     |
| 59. They don't have an incentive to protect my property G  | 0-5           | 4                    | 3                        |                  | 1   | 2                                    |     | 2.5     |
| 60. They don't have an incentive to protect my property HM   | 0-5           | 4                    | 3                        |                  | 1   | 1                                    |     | 2.3     |
| 61. They don't have an incentive to protect my property P&R  | 0-5           | 4                    | 3                        |                  | 1   | 1                                    |     | 2.3     |
| 62. They're professional G   | 0-5           | 4                    | 5                        |                  | 4   | 4                                    |     | 4.3     |
| 63. They're professional HM  | 0-5           | 4                    | 5                        |                  | 5   | 4                                    |     | 4.5     |
| 64. They're professional P&R   | 0-5           | 4                    | 5                        |                  | 4   | 4                                    |     | 4.3     |
| 65. Their service is too expensive for what's delivered G  | 0-5           | 2                    | 3                        |                  | 5   | 3                                    |     | 3.3     |
| 66. Their service is too expensive for what's delivered HM   | 0-5           | 2                    | 3                        |                  | 3   | 2                                    |     | 2.5     |
| 67. Their service is too expensive for what's delivered P&R  | 0-5           | 3                    | 3                        |                  | 5   | 2                                    |     | 3.3     |
| 68. I'll not be compensated for a criminal loss G  | 0-5           | 4                    | 3                        |                  | 5   | 4                                    |     | 4.0     |
| 69. I'll not be compensated for a criminal loss HM   | 0-5           | 4                    | 3                        |                  | 5   | 5                                    |     | 4.3     |
| 70. I'll not be compensated for a criminal loss P&R  | 0-5           | 5                    | 3                        |                  | 5   | 2                                    |     | 3.8     |
| 71. They could make an error that harms me G   | 0-5           | 1                    | 1                        |                  | 4   | 5                                    |     | 2.8     |
| 72. They could make an error that harms me HM  | 0-5           | 1                    | 2                        |                  | 3   | 0                                    |     | 1.5     |
| 73. They could make an error that harms me P&R   | 0-5           | 3                    | 1                        |                  | 3   | 2                                    |     | 2.3     |
| 74. They care G  | 0-5           | 4                    | 5                        |                  | 4   | 3                                    |     | 4.0     |
| 75. They care HM   | 0-5           | 4                    | 5                        |                  | 5   | 4                                    |     | 4.5     |
| 76. They care P&R  | 0-5           | 4                    | 5                        |                  | 3   | 4                                    |     | 4.0     |
| 77. They won't catch the criminal G  | 0-5           | 1                    | 0                        |                  | 3   | 0                                    |     | 1.0     |
| 78. They won't catch the criminal HM   | 0-5           | 1                    | 2                        |                  | 2   | 4                                    |     | 2.3     |
| 79. They won't catch the criminal P&R  | 0-5           | 1                    | 0                        |                  | 2   | 1                                    |     | 1.0     |
| 80. Some of them are on power trips G  | 0-5           | 3                    | 0                        |                  | 3   | 0                                    |     | 1.5     |
| 81. Some of them are on power trips HM   | 0-5           | 4                    | 0                        |                  | 4   | 0                                    |     | 2.0     |
| 82. Some of them are on power trips P&R  | 0-5           | 3                    | 0                        |                  | 3   | 0                                    |     | 1.5     |
| 83. What are the ages and sexes of the members of your household?  |               | 68F<br>71M           | 13F<br>24F<br>27F<br>44F |                  | 80M<br>52F  | 12F<br>14M<br>35F<br>40M             |     |         |
| 84. What is your household income?   |               | refused to answer    | 40,000                   |                  | 16,000  | 70,000                               |     |         |
| 85. Is any member of your member handicapped or frail?   | 1=yes, 0=no   | 1                    | 0                        |                  | 1   | 0                                    |     |         |
| 86. Cell phone   | 1=yes, 0=no   | 0                    | 1                        |                  | 1   | 1                                    |     |         |
| 87. Newspaper  | 1=yes, 0=no   | 1                    | 0                        |                  | 1   | 1                                    |     |         |
| 88. Cable or satellite TV  | 1=yes, 0=no   | 1                    | 1                        |                  | 1   | 1                                    |     |         |
| 89. Lawn service   | 1=yes, 0=no   | 0                    | 1                        |                  | 1   | 0                                    |     |         |
| 90. Maid or cleaning service   | 1=yes, 0=no   | 0                    | 0                        |                  | 0   | 0                                    |     |         |
| 91. Pest control service   | 1=yes, 0=no   | 0                    | 1                        |                  | 1   | 1                                    |     |         |

## Pilot Questionnaire Results

On the viability of subscription patrol and restitution services  
by Gil Guillory and Brian Drake

| question   | coding notes  | 1-1 | 2-1 | 2-2 | 2-3 | 2-4 | sum | avg |
|--|---------------|-----|-----|-----|-----|-----|-----|-----|
| 92. Dialup internet  | 1=yes, 0=no   | 0   | 1   |     | 0   | 0   |     |     |
| 93. Broadband internet   | 1=yes, 0=no   | 0   | 0   |     | 1   | 1   |     |     |
| 94. VOIP telephone service   | 1=yes, 0=no   | 0   | 0   |     | 0   | 1   |     |     |
| 95. Traditional land line telephone service  | 1=yes, 0=no   | 1   | 1   |     | 1   | 0   |     |     |
| Sum of subscription services   |               | 3   | 6   |     | 7   | 6   |     | 5.5 |
| 96. Do you change your own oil, or do you pay someone to do it?                    | 1=pay, 0=self | 1   | 1   |     | 1   | 1   |     |     |
| 97. Do you wash your own car, or do you pay someone to do it?                      | 1=pay, 0=self | 0   | 0   |     | 1   | 0   |     |     |
| 98. Thinking about household repairs in this house, which of these have been done? |               |     |     |     |     |     |     |     |
| 99. Replace water heater Y?  | 1=yes, 0=no   | 1   | 0   |     | 1   | 0   |     |     |
| 100. Replace water heater DIY?   | 1=yes, 0=no   | 1   | 0   |     | 0   | 0   |     |     |
| DIY adder  |               | 1   | 0   | 0   | -1  | 0   |     |     |
| 101. Install new flooring or tile Y?   | 1=yes, 0=no   | 0   | 0   |     | 1   | 0   |     |     |
| 102. Install new flooring or tile DIY?   | 1=yes, 0=no   | 0   | 0   |     | 0   | 0   |     |     |
| DIY adder  |               | 0   | 0   | 0   | -1  | 0   |     |     |
| 103. Install new sink or toilet Y?   | 1=yes, 0=no   | 0   | 0   |     | 0   | 1   |     |     |
| 104. Install new sink or toilet DIY?   | 1=yes, 0=no   | 0   | 0   |     | 0   | 1   |     |     |
| DIY adder  |               | 0   | 0   | 0   | 0   | 1   |     |     |
| 105. Repair toilet Y?  | 1=yes, 0=no   | 0   | 0   |     | 1   | 1   |     |     |
| 106. Repair toilet DIY?  | 1=yes, 0=no   | 0   | 0   |     | 1   | 0   |     |     |
| DIY adder  |               | 0   | 0   | 0   | 1   | -1  |     |     |
| 107. Repair wall / drywall Y?  | 1=yes, 0=no   | 0   | 0   |     | 0   | 1   |     |     |
| 108. Repair wall / drywall DIY?  | 1=yes, 0=no   | 0   | 0   |     | 0   | 0   |     |     |
| DIY adder  |               | 0   | 0   | 0   | 0   | -1  |     |     |
| 109. Install new light fixture or ceiling fan Y?                                   | 1=yes, 0=no   | 0   | 0   |     | 1   | 0   |     |     |
| 110. Install new light fixture or ceiling fan DIY?                                 | 1=yes, 0=no   | 0   | 0   |     | 1   | 0   |     |     |
| DIY adder  |               | 0   | 0   | 0   | 1   | 0   |     |     |
| 111. Paint exterior of house Y?  | 1=yes, 0=no   | 0   | 0   |     | 1   | 0   |     |     |
| 112. Paint exterior of house DIY?  | 1=yes, 0=no   | 0   | 0   |     | 0   | 0   |     |     |
| DIY adder  |               | 0   | 0   | 0   | -1  | 0   |     |     |
| 113. Refinish or refurbish furniture Y?  | 1=yes, 0=no   | 0   | 0   |     | 0   | 0   |     |     |
| 114. Refinish or refurbish furniture DIY?  | 1=yes, 0=no   | 0   | 0   |     | 0   | 0   |     |     |
| DIY adder  |               | 0   | 0   | 0   | 0   | 0   |     |     |
| 115. Paint an interior room Y?   | 1=yes, 0=no   | 0   | 0   |     | 0   | 1   |     |     |
| 116. Paint an interior room DIY?   | 1=yes, 0=no   | 0   | 0   |     | 0   | 0   |     |     |
| DIY adder  |               | 0   | 0   | 0   | 0   | -1  |     |     |
| 117. Install closet organizer Y?   | 1=yes, 0=no   | 0   | 0   |     | 0   | 0   |     |     |
| 118. Install closet organizer DIY?   | 1=yes, 0=no   | 1   | 0   |     | 0   | 0   |     |     |
| DIY adder  |               | 0   | 0   | 0   | 0   | 0   |     |     |
| DIY score  |               | 2   | 1   | 0   | 1   | -1  |     | 0.6 |

### Appendix 4

## Demand Curve Answers

*On the viability of subscription patrol and  
restitution services*

by Gil Guillory and Brian Drake

| P&R price point, \$/mo | sums    |         |      | Note: 1=yes, 0=no |                |                |                |                |  |
|------------------------|---------|---------|------|-------------------|----------------|----------------|----------------|----------------|--|
|                        | PR only | HM only | both | 1-1<br>PR only    | 2-1<br>PR only | 2-2<br>PR only | 2-3<br>PR only | 2-4<br>PR only |  |
| 5                      | 0       | 0       | 4    | 0                 | 0              | NR             | 0              | 0              |  |
| 10                     | 0       | 1       | 3    | 0                 | 0              | NR             | 0              | 0              |  |
| 15                     | 0       | 1       | 3    | 0                 | 0              | NR             | 0              | 0              |  |
| 20                     | 0       | 1       | 3    | 0                 | 0              | NR             | 0              | 0              |  |
| 25                     | 0       | 1       | 3    | 0                 | 0              | NR             | 0              | 0              |  |
| 30                     | 0       | 2       | 2    | 0                 | 0              | NR             | 0              | 0              |  |
| 35                     | 0       | 2       | 2    | 0                 | 0              | NR             | 0              | 0              |  |
| 40                     | 0       | 2       | 2    | 0                 | 0              | NR             | 0              | 0              |  |
| 45                     | 0       | 2       | 2    | 0                 | 0              | NR             | 0              | 0              |  |
| 50                     | 0       | 2       | 2    | 0                 | 0              | NR             | 0              | 0              |  |
|                        |         |         |      | HM only           | HM only        | HM only        | HM only        | HM only        |  |
| 5                      |         |         |      | 0                 | 0              | NR             | 0              | 0              |  |
| 10                     |         |         |      | 0                 | 0              | NR             | 1              | 0              |  |
| 15                     |         |         |      | 0                 | 0              | NR             | 1              | 0              |  |
| 20                     |         |         |      | 0                 | 0              | NR             | 1              | 0              |  |
| 25                     |         |         |      | 0                 | 0              | NR             | 1              | 0              |  |
| 30                     |         |         |      | 0                 | 1              | NR             | 1              | 0              |  |
| 35                     |         |         |      | 0                 | 1              | NR             | 1              | 0              |  |
| 40                     |         |         |      | 0                 | 1              | NR             | 1              | 0              |  |
| 45                     |         |         |      | 0                 | 1              | NR             | 1              | 0              |  |
| 50                     |         |         |      | 0                 | 1              | NR             | 1              | 0              |  |
|                        |         |         |      | both              | both           | both           | both           | both           |  |
| 5                      |         |         |      | 1                 | 1              | NR             | 1              | 1              |  |
| 10                     |         |         |      | 1                 | 1              | NR             | 0              | 1              |  |
| 15                     |         |         |      | 1                 | 1              | NR             | 0              | 1              |  |
| 20                     |         |         |      | 1                 | 1              | NR             | 0              | 1              |  |
| 25                     |         |         |      | 1                 | 1              | NR             | 0              | 1              |  |
| 30                     |         |         |      | 1                 | 0              | NR             | 0              | 1              |  |
| 35                     |         |         |      | 1                 | 0              | NR             | 0              | 1              |  |
| 40                     |         |         |      | 1                 | 0              | NR             | 0              | 1              |  |
| 45                     |         |         |      | 1                 | 0              | NR             | 0              | 1              |  |
| 50                     |         |         |      | 1                 | 0              | NR             | 0              | 1              |  |

## Appendix 5

### Interview Notes

### *On the viability of subscription patrol and restitution services*

| <b>date</b> | <b>sequence</b> | <b>number</b> | <b>notes</b>  |
|-------------|-----------------|---------------|---|
| 4-Feb-06    | 1               | 1-1           | Older man, at the home of her daughter. Both man and daughter subscribe. Quality of interview suspect, due to both clarity of responses and perceived fatigue near end of interview.  |
| 11-Feb-06   | 2               | 2-1           | Middle-aged widow, owner of the home, lives with her two daughters and sister. Quality of interview suspect, due to language barrier.   |
| 11-Feb-06   | 3               | 2-2           | Middle-aged woman and mother. Subscribed to home monitoring because it came with her house, but not satisfied with service. Terminated interview because guests arrived at her house.   |
| 11-Feb-06   | 4               | 2-3           | Older man, lives with a woman in her fifties. Satisfied with home monitoring services, wants more patrol in his neighborhood.   |
| 11-Feb-06   | 5               | 2-4           | Middle-aged man, husband and father. Moved from L.A., where his condo complex used private security. Impressed with security services there, open to use in The Woodlands. Disclosed "old felony conviction" keeps him from owning a gun. |