The Long and Winding Road: An Experiential Study of Mongolian Transit

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The Long and Winding Road:
An Experiential Study of Mongolian Transit

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Abstract

The purpose of my ISP was to partake in an experiential study of the Mongolian transit system. In order to do this, I opted to travel the countryside by bus for two weeks. Portions of this paper provide a narrative account of my travels and details the intricacies of countryside transit. While on the road, I also tracked the prices of various items throughout the country and here provide information as to their transport-related fluctuations. In one chapter, I provide projected data about an improved road system to replace Mongolia’s current setup, using the specifics of an American highway to reduce travel times and costs. I then provide information regarding and analysis of Mongolia’s current efforts to reform its transit system. For a laugh, read the first part. For some pretty interesting information about the transit system and its future, read the second part.
In order to study the transit system of the Mongolian countryside I took to travelling by bus for two weeks in early May. Over the course of my fifteen-day journey throughout the Mongolian countryside, I spent a total of 123.36 hours, or 5.14 days riding in various vans and buses. I traversed a total of 3,798 kilometers over hills and mountains, through valleys and across rivers. In doing so, I learned infinitely more than I ever could have simply by reading books or interviewing others. I know about the state of the roads because they rocked my bus so hard in the nights that I could not sleep, opting instead to remain awake to appreciate the views by moonlight. I know that the bridges are suspect because my buses charged through rivers, ignoring the faulty infrastructure and...
providing me with a wild ride. I went into the hoodo because I wanted to see it all for myself, and I did.

First and foremost in my method of study was diligent observation. I kept a journal on my person at all times in order to record the curious details and hilarious eccentricities of the Mongolian transit system. The amalgamation of these notations comprises my first chapter entitled ‘It’s About the Journey’ in which I provide a brief narrative of my travels. This section may not be all too interesting to the Mongolian reader who has participated in cross-country bus travel in his or her past. I believe, however that for the non-Mongolian reader, this will serve as an informing and entertaining glimpse into life in the nation’s transit system.

My further data collection included tracking the prices of various products along my route of travel, determining whether they fluctuated as a result of transportation costs. The results of this portion of my study comprise the chapter ‘To Move a Coke’. The following chapter, entitled ‘The Ideal Road: A Holmberg Production’ was perhaps created as a result of too much time spent on buses driving over rocks. In this chapter, I provide projections for an improved system of roads for the Mongolian countryside. These simulations propose a transit system implementing direct, high-quality roads that could save massive amounts of time and money for Mongolians in the future. In the following chapter, entitled ‘The Road Ahead’ I detail and analyze Mongolia’s current efforts to improve its transit infrastructure system. Finally, in my concluding
chapter, I debate the pros and cons of overhauling the national road network.

Most of the evidence I present will be anecdotal, observational and representative of a single man’s journey. I realize that my experiences do not accurately depict the whole of this country and that my numbers and data are probably not statistically relevant. Having said that, this paper is not meant to serve as a scientific analysis of Mongolian transit, but more as the semi-academic ramblings of a traveling fool. I set out to experience this country, and experience it I did. I know this transit system because I lived it, I breathed it and I bounced around upon it. This was an amazing experience, a time of absolute adventure in my life, when I was a stranger in a strange land with no expectations and no plan. The result of the experience is this paper. Enjoy.

II. It’s About the Journey

When one buys a ticket for a Mongolian bus, one is not purchasing the typical package associated with American transit. In
America, I am accustomed to reserving a seat on the bus, a private space within the vehicle that serves as my personal domain throughout the journey. I am also used to a specific itinerary by which the transporter and the transported agree about specific departure and arrival times. Not the case in Mongolia. When participating in Mongolian cross-country bus transit, you enter an agreement that assures you at some point, you will reach your destination. That is about it. Your seat is not guaranteed nor is it wholly yours. I have been in vans in which twenty people have shared a space intended for twelve where your seat is the stranger upon whom you sit and whose seat, in turn is the stranger buried even deeper. Transit times vary wildly and are subject to a myriad of external factors including precipitation, bodies of water, rocky terrain and lost drivers. For example, while my fellow student’s bus completed the journey to Khovd Aimag Center in a swift thirty-six hours, my transit time to the same location was a whopping forty-eight hours. A twelve-hour difference may not seem significant; but it is significant.

While I typically enjoy long road trips, the fundamental difference between those and my Mongolian expedition were their eponymous quality: roads. There are no roads in the Mongolian countryside. This statement is surely an exaggeration, but is also astoundingly near fact. My purely ignorant and uninformed estimation while on travelling was that no more than five percent of countryside transit is carried out upon what I consider roads. Paved roads exist in the twenty minutes entering and
exiting an Aimag center. Roads in the countryside, however are merely routes that vehicles have travelled in the past in order to get from point A to point B. The constitution of these “roads” are tire tracks imprinted in the otherwise untouched and untamed nature of the countryside. This fact makes for quite a wild bus ride.

I travelled first to Olgii riding in a small bus with fourteen other passengers. My seat was the furthest toward the rear, just before the area where the baggage was kept. Once you enter the bus, your baggage is taken from you, loaded into this area and you do not see it again until you reach your destination. This is a result of the large quantity of bags coupled with the minimal amount of space in the bus. The solution is piling the bags from floor to ceiling, then tying tightly together so that they do not shift and crush the poor patron sitting directly before them. I happened to be this patron on this particular bus ride and I must say that I lived in fear of the bulging tidal wave of bags being kept at bay by one suspect tether. With every bump in the road, the bags encroached more and more into my zone threatening to crush me.

Besides the menacing canopy of baggage above me, I was attacked on all sides by unpleasantness. Behind me was a seat that inclined a bit forward of normal and had a sharp metal bar running the length of it so that it jut into your back. Before me was a lack of space for knees that forced me to jam them into the back of the patron sitting in front of me. Due to the lack of padding on the seats, I am sure she felt
my knees for the duration of the trip and I can only hope that it was more of a back massage than a total nuisance. To my right was sometimes my travelling companion, William David Griffith, but for one strange night was a very friendly Kazakhstani gentleman with a scraggly mustache who had no qualms about forcibly cuddling me all night. It was a strange night, but all nights on the bus are strange because there is no sleeping during countryside transit. To my left was the window, a favorite place to lean on and sleep on long car rides but is quite treacherous during Mongolian countryside transit. The constant, aggressive bumpiness of the driving makes the window a painful place for your whole left side. The same painful principle applies to all otherwise comfortable leaning surfaces. Below me were cardboard boxes that made it so my legs were constantly crammed up and I sat like I was doing the lengthiest cannonball of my life. One of these boxes began leaking in the night and I awoke to find that I had been resting on a vat of lard and my shoes were full of its contents. It was a good morning.

While I did not have much space to myself, the ride was actually rather civilized. The driver stopped for bathroom breaks every few hours, and the people were very friendly. The few times we stopped for meals were quite a unique experience. The busses pull up to a family’s ger and all of the passengers pile inside for a cheap home-cooked meal. I am convinced that only in Mongolia can one come across such hospitality to strangers. Fifty-seven hours on that bus landed me in Olgii, the Aimag-
center of the very far western and culturally Kazakhstani Aimag of Bayan-Olgii. After a few days of hiking, I decided to move to Khovd Aimag. In order to do so, I headed over to the market, where typically many busses and vans are waiting with posted destinations to nearby Aimag centers. I negotiated with a few drivers and settled on one gentleman who offered the best price, but who spoke exclusively Kazak. While waiting to depart, an English speaking Mongolian gentleman offered me a ride to Khovd with a more comfortable vehicle and a better price. I immediately took him up on his offer. I have referred to this practice as ‘hitchhiking’, but I have found it to be more of an unofficial and unlicensed public transit system.

The ride to Khovd was my first foray into a Mongolian transit phenomenon that I have come to refer to as “errand time.” I have found that when a Mongolian driver tells you a time that you will depart, you will in actuality be departing no less than two hours after said time. Errand time can be used in a variety of ways, both practical and otherwise. When riding on a larger bus from Ulaangom, the drivers waited until all of the passengers were aboard to go gas up then service the engine. In Moron, twenty-two of us passengers waited for hours in a packed microbus looking on as our driver ambled around the market, sipped on vodka and punched an elderly gentleman in the testicles. (Did I mention he was a Nazi?) In Khovd, my driver used his designated errand time to go to the grocery store, pick up his wife and daughter from kindergarten.
and then spend an hour at his place of work while I waited in the car. There was no apology for the inconvenience and I did not expect it. Errand time is just part of the deal.

When it was finally time to go, we exited the city at a much greater speed than I had moved in the microbus. This was a Nissan SUV and I was sure that the ride would be quick and painless. I am not exaggerating when I say that we made it only one hundred yards from the city limits before the car’s right rear tire blew out. My driver’s high speeds were overly ambitious and the roads punished us for them. My driver and his wife (a sniper in the Mongolian military- awesome) calmly exited the car and replaced the tire with a speed that suggested that this happens all the time. They were not angered nor apparently stressed, but accepting that the roads giveth transit and taketh away tires. From then on, we maintained a drastically reduced pace and my driver was much more speculative of which of the many possible paths he could take.

When the terrain becomes difficult in the countryside, there is a proliferation in the amount of roads to choose from. Some are well worn, but deep and wet and some are less travelled by but offer better passage around tough obstacles. Much of the time spent driving in the countryside is spent weighing one’s options and possible routes at such sites. When heading to Olgii, newly melted snow running off the mountains had caused the rivers to grow in size and current. While I would consider these an impasse, my drivers would carefully scope out the path of least
resistance and submerge the bus into the river. Sometimes the water would reach above the wheels until it was level with your feet and threatened to come bursting through the door, but the bus survived by some miracle. Post-river, we spent about two hours in park as the drivers overhauled the engine. Bus repair was performed multiple times per day but this was an especially impressive spectacle. I witnessed my drivers use their bare hands to manipulate live wires as well as suck oil and water out of various tubes. Try asking for that type of commitment from the good folks at GreyHound. My drivers were true company men.

I found that transit from Aimag-center to Aimag-center is an extremely easy move, but experience taught me that transport from more remote cities is difficult to come by. I hitched a ride with a vehicle travelling from Ulaangom to Ulaanbaatar and hopped off when I reached the soum center closest to my next destination of Moron. At the markets where I usually found convenient transport, I found that no available transport to Moron. One driver offered to take me there for two million Tugrug, the rough equivalent of 2,000 USD. I then put a driver on the phone with the good people at SIT, who struck up an expensive but reasonable deal with a kind elderly driver. In another wonderful display of Mongolian hospitality, our driver took Will and I to his house for tea and dinner before departing, cooked by his lovely wife. I conversed with his English-speaking daughter on the phone who wanted to give me a background check before allowing me to ride with her parents. I was
approved, and furthermore delighted at how personal the culture of transit is in this country.

From Moron, I moved to Khatgal, where I did a bit of hiking around Lake Khovsgol. The journey there and back were among the smoothest legs of the trip, because of the very welcomed presence of a paved road. Smooth and efficient as it was, however the driver chose not to use it for portions of the trip, opting instead for the slow and rocky path beside it. I interviewed a peace corps volunteer in Olgii who told me that instances like this are a result of drivers’ distrust of the infrastructure. In the aftermath of that conversation, I witnessed the phenomenon multiple times. One driver drove through a river while avoiding a perfectly sound looking bridge. He simply pointed at the bridge and declared “Ene muu,” which is Mongolian for “it’s bad”. One of the few bridges I did cross was while riding on the largest and heaviest type of bus available for transit. As it crossed the small wooden bridge in defiance of the 4,000-kilogram weight limit and God himself, I did begin to brace myself for the impending crash. Another driver had all of us passengers exit the bus before crossing a bridge, perhaps because of the weight consideration, or perhaps it was more heroic. Either way, I grew to support the avoidance of and grow in my distrust of the infrastructure.

I have been told many times of the trait of Mongolian adaptability, supposedly derived from its age-old culture nomadic life on the steppe. To adapt to the infinite challenges of this lifestyle is to
survive, and the trait has become a fundament of the Mongolian character. An example of this trait occurred during my journey-concluding bus ride from Moron to Ulaanbaatar. When twenty-two people gradually piled into the bus, occupying thirteen seats, folks simply offered their laps to the additional passengers and remained thusly seated for the duration of nineteen hours. Not one appeared remotely discontented by the affair. At two-o’clock in the morning, the bus reached a winding road up a snowy mountain and could not proceed further without a great deal of manual labor. For three hours, all hands gathered rocks and sticks from the surrounding forests, placed them beneath the tires and pushed. The bus would gain traction, zoom hundreds of yards ahead and we would gather our materials and proceed by moonlight to where it had gotten its self re-stuck. It was dangerous and the bus would slide back into you sometimes, but everyone looked out for one another. When the ordeal was over, we all shook hands and piled back into the bus, united in a unique solidarity. Perhaps above all, you learn to expect the unexpected out there.

I observed that my Mongolian counterparts were expectedly unfazed by the event, seemingly accepting that occurrences like these are a constant of transit. I noted the sole baby along for the ride never cried nor seemed at all disturbed by the crazy journey. Even from a young age, I have seen that Mongolian adaptability runs deep. While it took me many hours on the bus to adapt, I eventually did and I look back
fondly on the experience. These have been brief excerpts and random instances of wonderful and immensely rewarding journey. I highly recommend that my reader go out, buy a bus ticket and buckle up for a wild ride through Mongolia.

III. To Move a Coke

In order to travel from Ulaanbaatar to Olgii, I spent fifty-seven hours in a bus driving 1,636 road miles. I learned that moving a one hundred seventy-pound man from Ulaanbaatar to Olgii, required an 80,000 Tugrug bus ticket, as well as a great deal of time, patience and tolerance for the strange and unpredictable. The journey was difficult and I do not intend to attempt it again in the near future, but while such an arduous journey was a once-in-a-lifetime experience for me, it is a daily activity for the freight trucks shipping goods from the nation’s capital its periphery of Aimag centers. Surely such an odyssey would have some effect on prices and I set out to study them. I wanted to better understand the implications of price elevations for a countryside citizen. In order to examine the additional costs incurred by transportation from UB, I decided to track the prices of various food products throughout my travels. At first, my methods were less than effective. Heading to Olgii, the bus would make occasional stops for the purposes of bathroom breaks and meals. I would scurry around to various shops and note the prices of every available product.
Any establishment that read ‘Delgool’ was an exciting fieldwork opportunity. Most shops carried the same array of products, usually cookies, chips and sodas; the type of fare that satisfies the palate of the weary traveler that is craving road snacks. In my wake, I left a long string of shopkeepers both confused at my intentions and very disappointed that I did not purchase everythng in the store after eagerly inquiring about their prices. It must have seemed as if I were either quite stingy or that their prices were somehow outrageous. Perhaps these dozens of shopkeepers, traumatized by the experience have since lowered their prices. I will never know.

I would eventually come to disregard this data collected along the way to Olgii. While I do not stand to make a claim that my data is statistically sound, I decided that in order to develop a reasonably accurate average for the food prices, I would need to inventory no less than ten shops per city. My opportunities to inventory whist on the bus were limited and hence, they have been omitted. While on overnight stays in the various soums and Aimag centers of this country, I was able to inventory a great deal of shops and supermarkets. I am convinced that I inventoried the vast majority of all such establishments in the cities I visited, totaling in over a hundred data collection sites. As I travelled, I noticed less and less consistency in the products carried in food shops. Especially in the very culturally Kazakhstani Aimag of Bayan-Olgii, the selection of products were quite different and often of brands produced in
Kazakhstan or Russia. The two products that I found on shelves without fail were bottles of Coca-Cola and boxes of ChocoPies. Strangely, neither of these products that are so consistently abundant throughout Mongolia are native to the country. Coca-Cola is an American brand that has a Mongolian production hub and ChocoPies are a Japanese product by the Orion Company that are manufactured in China.

(Doin’ Fieldwork)

In order to make this data collection significant, I needed to determine that each of these products originated in Ulaanbaatar before it was shipped to its final destination. For the efforts of this aspect of my research, I would like to cordially thank the hard-working and dedicated Mongolian language teachers at SIT. In addition to inquiring the prices of various iterations of Coca-Cola and ChocoPies (God help those poor shopkeepers who did not mark their products with prices) I would struggle through a conversation determining whether these products came from Ulaanbaatar. I can say that I exited every shop convinced that these products came from UB, but I cannot say for certain that this
information was unilaterally accurate. I did my best. The average prices for all stores inventoried are as follows:

<table>
<thead>
<tr>
<th>km from UB</th>
<th>(s)coke</th>
<th>(m)coke</th>
<th>(l)coke</th>
<th>(s)CP</th>
<th>(m)CP</th>
<th>(l)CP</th>
</tr>
</thead>
<tbody>
<tr>
<td>UB</td>
<td>0</td>
<td>838</td>
<td>1,247.00</td>
<td>1761</td>
<td>940</td>
<td>1455</td>
</tr>
<tr>
<td>Moron</td>
<td>671</td>
<td>850</td>
<td>1450</td>
<td>1850</td>
<td>1050</td>
<td>1250</td>
</tr>
<tr>
<td>Tosontsengel</td>
<td>772</td>
<td>1133</td>
<td>1500</td>
<td>2000</td>
<td>1060</td>
<td>1386</td>
</tr>
<tr>
<td>Ulaangom</td>
<td>1336</td>
<td>1020</td>
<td>1410</td>
<td>2322</td>
<td>1140</td>
<td>1433</td>
</tr>
<tr>
<td>Khovd</td>
<td>1425</td>
<td>963</td>
<td>1500</td>
<td>2231</td>
<td>1044</td>
<td>1340</td>
</tr>
<tr>
<td>Olgii</td>
<td>1636</td>
<td>1000</td>
<td>1525</td>
<td>2200</td>
<td>1114</td>
<td>1440</td>
</tr>
</tbody>
</table>

The items inventoried are the small (500mL), medium (1.25 liter) and large (2 liter) bottles of Coca-Cola as well as the small (four-pack), medium (six-pack) and large (twelve-pack) boxes of ChocoPies. As is evident, there is no truly significant changes in prices as the products are transported further and further from UB. The numbers are strange and perplexing. For example, the average price of a small Coke bottle fluctuates slightly along its journey, culminating in an increased price upon reaching its final destination in Olgii. The twelve-pack box of ChocoPies, however experienced a similar price fluctuation along the way, but culminated in a decreased price upon reaching its furthest destination of Olgii. My hypothesis upon reviewing this data was wholly overturned. I anticipated that prices of food items transported from UB would gradually rise as I visited stores at increasing distances from the capital. I was hardened in this conviction as I travelled along the road by bus and experienced the distinct unpleasantness of countryside transit. Surely such an uncomfortable journey would be uncomfortable enough for the gentleman hauling Cokes and ChocoPies that the prices would become elevated. This was not the case.
Luckily I did not invest too much in my hypothesis because the first two nodes along my trip were the transportation ground zero of Ulaanbaatar and the very remote destination of Olgii. I was quickly able to determine that soda and chocolate would not yield the significant changes in price that I was searching for. I then considered the relative difficulty of transporting these food items. They were small, light and able to be stacked, compacted and transported with relative ease. I thought to myself, “It’s not like they are transporting refrigerators.” I then exited whatever supermarket I had been inventorying and headed straight for the closest electronics store in search of refrigerators.

The results from this next set of data collection were much more fruitful. In addition to inventorying Cokes and ChocoPies, I would gather prices of various computers, televisions, washing machines, ovens and of course, refrigerators. My going hypothesis was that size and weight were the most important factors in the increased price of transport for products in the countryside. This hypothesis was informed partly by my experiences during bus rides. The items that people would bring aboard the busses were astounding. I witnessed the bastardization of the concept of carry-on luggage whilst riding alongside large toaster ovens, picnic tables, and rocking horses. Most egregious among these offenders was the passenger to my rear along one long bus ride from Ulaangom to Tosontsengel: a rather large and intrusive thorn bush. You can bring **anything** on those buses. These experiences lent to my hunch that it
was easier to buy something large and move it one’s self than to pay for it once transported. It seems I was correct in this hypothesis.

I was lucky enough to find six identical product matches in Ulaanbaatar that I had inventoried in the countryside. I made certain that the product serial numbers were exact, verified their likenesses with photographic evidence and confirmed their origin was Ulaanbaatar through my standard struggle interrogation. Here is what I found:

<table>
<thead>
<tr>
<th>Product</th>
<th>UB Price (T)</th>
<th>Other City/distance</th>
<th>Other Price</th>
<th>Price change</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samsung Fridge 1</td>
<td>739,990</td>
<td>Khovd/1425</td>
<td>950,000</td>
<td>210,010</td>
<td>28</td>
</tr>
<tr>
<td>Samsung Fridge 2</td>
<td>599,990</td>
<td>Khovd/1425</td>
<td>720,000</td>
<td>120,010</td>
<td>20</td>
</tr>
<tr>
<td>Samsung Fridge 3</td>
<td>2,219,990</td>
<td>Ulaangom/1336</td>
<td>2,529,900</td>
<td>309,910</td>
<td>14</td>
</tr>
<tr>
<td>Samsung Washer</td>
<td>459,990</td>
<td>Ulaangom/1336</td>
<td>549,900</td>
<td>89,910</td>
<td>20</td>
</tr>
<tr>
<td>Simfer Oven</td>
<td>739,990</td>
<td>Khovd/1425</td>
<td>960,000</td>
<td>220,010</td>
<td>30</td>
</tr>
<tr>
<td>Sharp Fridge</td>
<td>319,990</td>
<td>Moron/671</td>
<td>419,900</td>
<td>99,910</td>
<td>43</td>
</tr>
</tbody>
</table>

(UB Samsung refrigerator and identical Khovd refrigerator.)

My first set of data collection was from the various random electronics stores in the countryside, so when I visited Ulaanbaatar’s
State Department Store and Next Electronics, I was amazed at the vast difference in prices. Unlike the small food items, these heavy appliances shot up in price when transported from the capital to the countryside. The largest change in price was a massive Samsung brand double-door refrigerator I found in Ulaangom that had undergone a massive 309,000 Tugrug price change. By percentage price change, the most drastic alteration was a small but hefty Sharp brand refrigerator whose price had increased to an astounding 43% after being shipped to Moron. The average price elevation by percentage for all products inventoried totaled to 26%, meaning that in order to buy these appliances transported from the capital, consumers need to be willing to accept a considerable markup.¹ The implications for the people of the countryside is to simply buy the expensive appliances, buy them in Ulaanbaatar at reduced cost or go without. Beyond the scope of this paper, I would like to perform a more in depth study regarding such consumer decisions.

IV. The Ideal Road: A Holmberg Production

When broken down into individual legs of the journey, the transit times and road distances (in kilometers) of my travels were as follows.

¹ I must concede here that I cannot say for certain that this markup is attributed solely to the cost of shipping. I inquired from electronics stores in the countryside about this added cost but the information was muddled and unreliable. Beyond the scope of this paper, I would attempt to interview relevant appliance manufacturers and distributors to acquire more information.
This amounted to a total of 123.5 hours in a bus travelling on 3,798km of road.\textsuperscript{3} When I worked out the math on this travel data, the average speed of my transit was simply astonishing.

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|}
\hline
& Time & Road Distance \\
\hline
UB>Olgi & 57 Hours & 1636 \\
Olgi>Khovd & 7 Hours & 211 \\
Khovd>UG & 6.5 Hours & 238 \\
UG>Ts & 19 Hours & 590 \\
Ts>Moron & 9 Hours & 250 \\
Moron>Khotgol & 3 Hours & 101 \\
Moron>UB & 19 Hours & 671 \\
\hline
\end{tabular}
\end{table}

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|}
\hline
& Average Speed (km/h) & mph \\
\hline
UB>Olgi & 28.7 & 17.83 \\
Olgi>Khovd & 30.14 & 18.73 \\
Khovd>UG & 36.62 & 22.75 \\
UG>Ts & 31.05 & 19.29 \\
Ts>Moron & 27.78 & 17.26 \\
Moron>Khotgol & 33.67 & 20.92 \\
Moron>UB & 35.32 & 21.95 \\
\hline
\end{tabular}
\end{table}

Evidently, my top average speed occurred during the leg of my journey from Khovd to Ulaangom when it topped out at 22.75 mph. To put this figure into perspective, the speed limit on a typical American interstate highway is sixty-five miles per hour. The quality of American roads and vehicles and infrastructure could support speeds in vast excess of sixty-five mph, but federal regulation and police enforcement forbids it. On the roads of the Mongolian countryside, the only factor limiting the speed of travel is the terrain. While ambling over rocks and other such obstacles, vehicles must crawl at near zero speeds for miles at a time and otherwise proceed very slowly. Even when travelling better-established

\textsuperscript{2} Road distances acquired from \textit{Lonely Planet}.

\textsuperscript{3} I travelled to and from Khatgol on the same road, so the distance travelled between them is doubled in my calculations.
roads, I experienced vehicular damage such as multiple flat tires. The poor quality of the roads is a serious hindrance to the speed of transit.

In an interview with an American Peace Corps volunteer who had experienced a great deal of countryside travel, he stated that his “biggest gripe” about the country was its less than satisfactory road network. He believed that “Mongolia would transform massively if there were good roads.” I was intrigued by this concept and decided to formulate some projective data as to just how much things would improve if the country had better road infrastructure. Imagine a world in which Mongolia had perfect roads. In an absolutely ideal situation, the roads would follow a straight and direct path from one place to another. The ideal roads would be of a quality that supports high-speed travel, but for this hypothetical situation, I will impose a sixty-five mile per hour speed limit (104.6 km/h.) If Mongolia had roads by which a vehicle could travel at 104.6 km/h directly toward its destination, my journey would be drastically different. The following table illustrates the difference between the road distance travelled and the ideal straight path from one point along the route to another.
With ideal roads, I would have been able to forgo an astounding 953 miles on the bus. When speed is factored in, the journey becomes supremely less arduous.

With ideal roads, my travel time would have been reduced from the seemingly endless 123.5 hours to a manageable 26.3 hours total. That is a colossal, nearly one hundred hour disparity in transit time. Just consider the possibilities for the improvement of transit in routes from Ulaanbaatar to the periphery. I calculated the ideal travel times from the capital to prominent cities and the results can be found in the following table.

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4 Straight distances acquired from Google Earth.
With ideal roads the effective size of Mongolia, the most sparsely population country shrinks down massively. The fifty-seven hour drive to the super remote Olgii becomes a fraction of what it once was. One could have breakfast in Sainshand and be home in UB for dinner. The possibilities for national progress, improvement and benefit would be endless. The Peace Corps worker I interviewed stressed that better roads would “do wonders for national unity.” He told me that the culturally Kazak citizens of his resident Olgii feel disconnected from the rest of the country and I experienced this fact myself during my visit there. I believe that Olgii’s sense of disconnect is directly related to its degree of remoteness. With a better system of roads, I believe that great leaps could be made in their sense of unity with the whole of the country.

The country could further benefit economically by reducing the transaction costs of transportation. According to a UN development program report, in 2008 transportation costs alone accounted for about 18% of the country’s importation costs as well at 11% of its importation costs (Linking Up, 128). With better roads, these costs would surely decrease drastically and the further pecuniary benefits are numerous. Improved infrastructure would both decrease the transportation costs of
Mongolia’s international trade practices as well as lessen its dependency on foreign imports.

With better roads, there are thousands of specific markets that could be opened up to better satisfy the country’s needs. For example, the plight of the Mongolian dairy farmer would be swiftly ameliorated with an improved road system. While Mongolian dairy farmers are capable of producing more than enough milk to satisfy national demand, they are unable to efficiently transport their product to the markets such as the massive UB population. As a result, the bulk of the Mongolian supply of milk is imported from elsewhere such as China at a cost of 300 million dollars per year (Linking Up 128). This excessive and unnecessary cost could be easily erased from the country’s balance of trade in favor of supporting its own dairy producers in the countryside. This pure win-win situation could have thousands of iterations across the nation if Mongolian roads were improved.

V. The Road Ahead

The metaphorical road ahead, like those of the Mongolian countryside, is rocky with regard to infrastructure improvement. The road construction efforts face a plethora of obstacles. The weather, a constant challenge in Mongolia has a profound effect on construction as harsh winters result in a halt in production from October to April (Bricks and Mortar 162). That leaves less than half of the calendar year for actual
physical construction to take place, a wholly insufficient amount of time for the massive volume of work that need be completed. Another pressing issue is the high cost of construction materials. While the socialist regime of Mongolia’s past once supported an array of construction material plants, the transition to a market economy has left the majority of them either bankrupt or in production of low quality materials (Bricks and Mortar 163). Mongolia is therefore forced to import most of its building materials, primarily from China at a great cost that has been steadily increasing by twenty percent annually (Bricks and Mortar 163).

Additional negative repercussions from the democratic transition include a general degradation of the country’s construction industry. The ravages of the market economy have not been kind to this particular sector. While the construction sector once comprised 4.9% of national GDP in 1985, it had shrunk to a meager 1.4% by 2010 (Bricks and Mortar 163). It is an inconvenient truth that at the moment when Mongolia needs its construction sector to be at its most robust, it has shrunk to an underwhelming magnitude. According to the Oxford Business Group, Mongolia is home to only 28,000 trained construction workers, a fraction of what is required by its construction needs (Bricks and Mortar 162). Among such needs are the roads within the country’s own capital city. While the lack of roads in the countryside is a considerable problem, those in the nation’s hub are also a pressing matter. Over 54% of UB’s
roads are twenty-five years old more as is visible in their deterioration and the prevalence of large potholes (*Bricks and Mortar* 163). The massive population growth and a constant proliferation of vehicles in the city are only exacerbating the problem. With bad roads in the capital and no roads in the countryside, Mongolia must complete some substantial work soon or else face serious consequences.

Fortunately, there are currently a multitude of projects and a large volume of resources being directed toward road infrastructure. In 2011, as part of Mongolia’s current National Development Strategy, Prime Minister S. Batbold announced that Mongolia would be investing 1.17 billion dollars on road and rail construction and maintenance in the following year (*Linking Up* 128). The central body that manages such initiatives in Mongolia is the Ministry of Roads, Transportation, Construction and Urban Development (MRTCUD). Within the MRTCUD, there are several active infrastructure initiatives including the National Transport Strategy for Mongolia and the “Transit Mongolia” program of 2008-2015 (*Bridging and Connecting* 46). While these programs have experienced various degrees of success, the ministry’s most promising program is its Mongolian Road Master Plan. This is an ambitious fifteen-year investment plan that will oversee a multitude of intricate road construction projects such as the linking of all twenty-one Aimags to the capital in Ulaanbaatar. This massive undertaking requires the construction of 7,875km of new highways across the nation. Initial stages...
of the project began in 2011 when the ministry set out to construct 1,370 km of roads and it hopes to have completed 4,200 km by 2016 (Bricks and Mortar 163).

Part of the construction initiative is a group of three major roads called the AH3, the AH4 and the AH32. The long-term goal of these roads is to “provide linkage by road from the Korean peninsula to the Finnish border and from the southern tip of China to Istanbul” (Linking Up 128). The AH3 connects key industrial sites and mines in Southern Mongolia while the AH32 provides east-west transportation. Finally, the AH4 connects China to Siberia, facilitating easier and higher volumes of trade between the nations and Mongolia. The MRTCUD intends that this road become a 990km four-lane highway durable enough to withstand the punishment of constant freight vehicles traffic transporting goods across the continent (Bricks and Mortar 163). The construction efforts are also active in the capital city as plans for extensive roadwork are in the works for Ulaanbaatar. In the coming years, 350 km of Ulaanbaatar’s roads will experience enhanced maintenance and repair, 212km of new roads will be build and seven flyovers will be constructed (Bricks and Mortar 163).

The nation’s big plans have the potential to be hampered by its preexisting obstacles, but its government is hard at work remedying them. For example, there are new regulations in practice that are helping to lessen the costs of construction materials as well as revitalize

Holmberg 30
Mongolia’s own construction materials production sector. A 2011 law allows tax and customs exemptions on imported machinery used in construction materials plants and a newly instituted Development Bank of Mongolia is helping to generate increased funding for construction projects (Bricks and Mortar 163). Furthermore, the government is attempting to ameliorate its human capital deficiencies by implementing updated versions of vocational training programs once active during the Soviet era (Bricks and Mortar 163). While the nation is currently home to a mere 28,000 trained construction workers it hopes to vastly increase that number in the coming years.

Mongolia is performing the bulk of its construction on its own accord, but it is also actively cooperating internationally in order to meet its infrastructure objectives. First and foremost, Mongolia is collaborating Russia and China in order to build a trade road between them. The scope of Mongolia’s international cooperation extends far beyond its two massive neighbors, however as the nation has also begun collaborating on mutually beneficial road construction projects with the Kazakhstan, Ukraine, Belarus, Turkey and the Kyrgyz Republic (Flyover 29). The nation has been working with such international trade conventions as the International Transport of Good Under Cover of TIR Carnet, the Convention on the Contract for the International Carriage of Goods by Road and the Convention on Road Traffic, Road Signs and Signals (Linking Up 128). Further, transnational corporations, most predominantly
those of the mining sector have a vested interest in the improvement of Mongolian infrastructure and have been pouring resources into the country in order to achieve that end. For example, discoveries of mineral deposits at such locales as Oyu Tolgoi and Tacan Tolgoi have sparked a substantial flow of capital into the southern Gobi region. Some results of this development include plans to build better roads linking mines in Sainshand with the regional center of Dalanzadgad (Rural Areas Rising 168). With other willing nations and corporations lending resources to Mongolia’s infrastructure development, the nation has a strong potential for great success.

VI. Conclusion

“We’ve been travelling over rocky ground, but a new day is coming.”
- Bruce Springsteen

K. Battulga, the former Minister of Roads, Transportation, Construction and Urban Development, shared his opinion of Mongolia’s ambitious infrastructure enterprises in an interview with the Oxford Business Group. He expressed his concerns for the success of the massive undertakings.

In my opinion, the biggest obstacles to implementation are people’s misperceptions and distrust of Mongolia’s ability to see these projects through. This is quite understandable because we have never undertaken projects of this magnitude before, and we are facing these challenges for the first time (Building Trust 134).

Only time will tell whether these immense construction projects will yield fruitful results. I am certainly hopeful, but my fieldwork experiences
have led me to be somewhat skeptical of their prospects. I consider myself to me somewhat of an expert when it comes to the state of a certain 3,978km of Mongolian road and my general impression is that during the alleged construction season, there is little to no construction being carried out. There are still no roads out there. Again, this is an exaggeration, but it is also astoundingly near fact. Where all the effort and money of the aforementioned infrastructure initiatives have gone, I cannot say for certain. But from what I have seen, those resources have not been put sufficiently into the roads.

While I am certainly concerned for the potential pitfalls facing the Mongolian infrastructure efforts, I am also torn as to my position about them. I have seen evidence to support their creation as well as the opposite. The impact on the well established transit culture of the country would be radically altered with a revamped road network. Consider the roadside gers that once fed myself and thirty other weary travels Tsuven at odd hours of the night. McDonalds or a Taco Bell might replace the small family-run small canteen once the modern highway system encroaches. That wonderful sense of community shared by so many strangers breaking bread together could be lost along with so many other aspects of transit culture.

When I exhibited my ideal road projections to one of the staff at SIT, Ch. Ulziikhishig told me that I was writing pure fantasy. He would not accept that the system could change so drastically, and even expressed
reluctance to the change. While I thought I was presenting a glowing
vision of the future with smooth roads and short drives, he was less
enthusiastic. He remarked that he “would rather ride on a bumpy road
than a smooth road” for many reasons, one of which being that it was
simply “more fun.” I can see what he is saying, because I had an
unbelievable amount of fun out on those roads. I have heard Mongolia
described as one of the last frontiers, and in a way it is. To travel across
this country, I took a very long bus ride over a very bumpy road but it
was a wild ride and I had a beautiful adventure. If smooth roads connect
all corners of this country, and travel times diminish as I have projected,
then the opportunity to explore the country as I have will become a thing
of the past. The ride will not be quite so wild and the mystique of the
journey will be forever changed. Marco Polo traversed Mongolia on foot
and horse, and I did it on a bus. Soon we will both be heroes of a time
gone by.
VII. Methods: The Epilogue

In the aftermath of completing this Independent Study Project, I have come to better understand the flaws inherent within it and the areas in which more research would have done it great benefit. In the introduction to this paper, I openly admitted to the flaws in my data collection but I will review them here in more detail. Firstly, my narrative account of countryside travel was based on an isolated experience and is in no way representative of the nation’s transit system as a whole. My narrative account was meant not as a comprehensive study of the system, only as an anecdotal account of it. Further, my data collection overall was imperfect. For example, with regard to Coca-Cola prices, while I visited a vast amount of stores to collect data, my averages were not statistically relevant. I do not know the first thing about statistical relevancy and therefore assume that I did not achieve it. I was never quite certain whether the products I inventoried had actually originated in Ulaanbaatar.

For my data to have been significant, the products needed to have been shipped from the capital. I attempted to confirm this fact while inventorizing, but my conversations with the shopkeepers were confusing and may have yielded incorrect information. The language barrier proved to be an overall impediment to my research whether it was with regard to travel times, food prices or refrigerators. I now wish I could have interviewed shopkeepers and consumers alike about their purchasing
decisions. The language barrier led to my squandering of a potentially great interview with a professor at Olgii’s Mongolian Academy of Social Sciences and Economic Research. I scheduled a meeting with him and arrived to find that we could not conduct a productive interview in broken English and Mongolian. Especially considering the fact that my topic was infrastructure. I do not know the Mongolian word for infrastructure and I found the concept was very hard to describe. If I were to perform this research again, I would certainly consider hiring a translator.

While I did not think such information was necessary in the early stages of the project, I now wish that I had contacted organizations such as the Ministry of Roads, Transportation, Construction and Urban Development, certain appliance manufacturers such as Samsung and Orion, the ChocoPie company. (I did attempt multiple times to contact Mongolia’s Coca-Cola manufacturers, but they were unwilling to grant me an interview.) Information acquired from these organizations would have certainly helped to better flesh out my arguments. With regard to my chapter ‘The Ideal Road: A Holmberg Production,’ I am aware that my proposals are wholly unrealistic. Geographical, meteorological and thousands of other factor are obstacles to the roads I have proposed. They are simply meant to be revelatory as to how poor the Mongolian roads are when compared with the ideal. They are meant to be inspirational and generate motivation for improvement, nothing more.
Beyond the scope of this paper, I would like to have examined the financial and environmental effects of the excess gasoline used and its resultant carbon output as a result of Mongolia’s poor road network. While it is not included in the paper, I actually tracked gasoline prices along my route along with the other products. (Data and picture of data collection included below.)

![Gas prices](image)

<table>
<thead>
<tr>
<th>GAS</th>
<th>km from UB</th>
<th>80</th>
<th>92</th>
<th>DT</th>
</tr>
</thead>
<tbody>
<tr>
<td>UB</td>
<td>0</td>
<td>1453</td>
<td>1630</td>
<td>1665</td>
</tr>
<tr>
<td>Moron</td>
<td>671</td>
<td>1562.5</td>
<td>1850</td>
<td>1900</td>
</tr>
<tr>
<td>Ulaangom</td>
<td>1336</td>
<td>1580</td>
<td>1880</td>
<td>1880</td>
</tr>
<tr>
<td>Khovd</td>
<td>1425</td>
<td>1630</td>
<td>1976</td>
<td>1970</td>
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<tr>
<td>Olgii</td>
<td>1636</td>
<td>1600</td>
<td>1900</td>
<td>1900</td>
</tr>
</tbody>
</table>

It would have been very interesting to track the impact of the cost and environmental impact, but it would have been another ISP's worth of information. There are many other huge topics I ignored as well. Did you notice I completely ignored trains? The railway system is an extremely important factor in the national transit system, as are the airlines, but they were ignored in the interest of a more refined focus on the roads. The bottom line is that my methods were not the best. In
keeping with the SIT concept of experiential learning, however I have
grown from this Independent Study project and future projects will be
performed with an enhanced level of diligence.
VIII. Works Cited


Interview with Noah Gallagher, May 9, 2012.

Interview with Ch. Ulziikhishig, May 28, 2012.


Thanks for reading!

Love,
Tommy