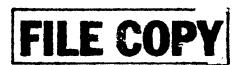
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Migration from the Russian North During the Transition Period

Timothy Heleniak

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# MIGRATION FROM THE RUSSIAN NORTH DURING THE TRANSITION PERIOD

**Timothy Heleniak** 

#### **Abstract**

A majority of Russia's crucial raw materials are located in its Northern periphery. During the Soviet period, there was a unique set of development practices that existed to exploit the resources of the Northern regions. These included financial and other incentives for people to move to and work in the North and the construction of large urban agglomerations in the region. The result was that Russia had a much more densely populated North than other countries with comparable high-latitude regions. Because of the economic structure of the Russian North, and the fact the growth of the population was mainly due to migration, the population tended to be younger, more highly educated, less Russian, more predominantly male, and more often born outside the region.

One unintended consequence of Russia's transition to a market economy has been a massive outmigration from the Northern periphery. From the 16 regions defined as North in this study, over
10 percent of the population has migrated out since 1989. At the extreme are several Northern
regions where over half the population has left during this period. Those leaving tended to be
younger and more highly educated in general those more able to do so. Many older and less able
persons are left in the North without the resources to be able to leave. Most of those who
migrated did so without government assistance. The major causes of this out-migration have been
price liberalization which make the cost of fuel, food, and other consumer goods in the North
more expensive; the fiscal decentralization which shifted the burden of local revenue and
expenditure responsibility to Northern regions which often lack the necessary capacity; and a
shift in Russia's approach to the development of its Arctic and sub-Arctic regions. Among
reasons given for leaving by recent migrants from the North included the fact that they always
viewed their stay in North as temporary and that it had become senseless to stay in the North.

The study begins with a conceptual comparison between the Northern development strategy that existed during Soviet period and that which is evolving under market conditions in Russia. This is followed by a comparison between the Russian North and other Northern regions elsewhere in the world. The major section of study examines patterns of migration in the Russian North during the transition period beginning with a brief history of the settlement of the Russian North, with an emphasis on the Northern development strategy that existed during the Soviet period. Data are presented showing the composition of the Northern population prior to transition. A description is then presented of the levels, direction, age-sex composition, educational, occupational characteristics, and mechanisms of Northern migration trends. Analysis of is then done of Northern migration trends according to migration theory in order to determine the causes of this mass migration. The final section attempts to determine the possible future levels of migration from the North that can be expected.

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#### **Forward**

The study of Migration from the Russian North During the Transition Period originated from a request from the Government of Russia to assist with resettlement from two Northern cities - Norilsk and Vorkuta. The Bank requested that this be preceded by a study of the major fiscal, economic, and social challenges facing the designated Northern region. The current study summarizes the Bank's analysis of the trends, patterns, and levels of the migration that have taken place in Russia's Northern regions during the period of economic transition. The causes and consequences of these migration flows are also explored.

Migration has long been a strategy of adaptation that has been employed in worldwide response to changing circumstances. In the seven years since the Soviet Union ceased to exist the successor states have embarked on various degrees of economic liberalization. As part of those changes, there has been a massive movement of people within and among the successor states, and between the former Soviet Union and the rest of the world. This migration actually began prior to the dissolution of the USSR when attempts at internal liberalization were made. The migratory movements set off by the breakup of the Soviet Union have compounded the social instability and economic hardships these states and regions face as they embark on the transition away from a centrally planned society.

One of the regions where the economic transition has had an enormous impact is in the Russian North. One of the overlooked aspects of the geography of Russia is how far North the country is located. Almost all of Russia lies to the North of the coterminous United States. The most southerly regions of Russia are at the same latitude as the United States' northern border with Canada. However, a large portion of Russia's energy and natural resources are located in its Northern periphery. The strategy for resource extraction, along with geopolitical considerations, led to a far different model from those employed by other Northern countries with market economies (e.g., in Canada, Norway or Sweden). The major characteristics of Soviet policy were much larger urban settlements, supported by massive government subsidies that came to represent over 2 percent of GDP in the late Soviet period.

The rapid depopulation of the Russian North during the period of economic transition can be viewed as a logical transition away from the artificial overpopulation of the Russian North during the Soviet period. As is pointed out in this paper, the transition out of the Russian North and the adjusting population of the North is not without difficulties and challenges. Those leaving tend to be younger and more educated, the cohort that is most likely to migrate in virtually all settings. Many older and less employable people are left in the North without the resources to be able to leave. While many have left the North, there remain more people than the economy of the region can sustain given the high costs and commensurate public subsidies needed. The growing number of those without the means to leave Russia's cold remote, high-latitude regions therefore remains a challenge.

Maureen Lewis Sector Manager, Human Development Economics Europe and Central Asia Region

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#### I. INTRODUCTION

- 1. The Russian North in Transition: It would be difficult to imagine Russia without it Northern territories. The region and its abundant natural resources have long played an important role in Russia and the Soviet Union's overall economic development. Initially, furs were the major attraction and later gas, oil, timber and other resources necessary for modern economic development became the sought-after commodities. As the Russian economy goes through the current social, economic, and political transformation so does its Northern periphery. The transformation of the Russian North can only be understood within the context of the overall systematic transition of the Russian economy and society. How the Russian North came to be and the current difficulties it faces are the result of the overall political-economic system that the Northern regions are a part of.
- 2. It is an interesting intellectual exercise to imagine how the Russian North would have been developed if the command-administrative economy of Soviet Union had never existed and the Northern regions had developed within the context of a market economy. A clue is offered by how other Northern regions in the world have developed. The aspect of the Russian North that is the subject of this study population size is a good illustration for comparison. The Russian North contains far more people than other Northern regions. There has already been considerable evidence of adjustment towards the population density levels of other Northern areas through massive out-migration. However, this process, as the transition of the country in general, has proceeded in a rather chaotic manner. Just as there is no blueprint for transition from plan to market, there are no guidelines for how the Russian North is to make the transition to sustainable development.
- 3. The overall transition of the Russian economy from central planning to some sort of market economy involves a number of simultaneous processes, all of which have an impact on the scale and type of development in the Northern regions. One that has had an enormous impact on the North has been the liberalization of prices. When prices were administratively set during the Soviet period, many of the implicit costs, especially for transport and energy, were hidden. The price liberalization of January 1992 caused the true cost to be reflected in consumer and other goods throughout the country. This had an especially severe impact in the distant Northern regions, as relative prices jumped considerably relative to other regions located closer to sources of production. Most forms of agriculture are not possible in the cold climate of the North, requiring most food, consumer, and other goods to have to be shipped from elsewhere in Russia.

The amount of goods that had to be shipped North in Russia to support the level of population and development were probably only possible under the Soviet pricing system which failed to incorporate the real cost of transportation to and from the North. The state sponsored 'Northern shipment' would probably not have been undertaken by a private company do to the inability to make a profit from the venture. The budget allocation for the 'Northern shipment' has declined considerably since 1992 and there are numerous problems reported in having this reduced amount delivered.

- 4. During Soviet times, when the economy was more centrally controlled, there was a long list of 'Northern' benefits paid from the state budget. These included benefits for moving to the North, living in the North, and returning from the North. The responsibility for financing many of these budget-funded benefits was passed along to enterprises and local Northern governments during the early period of economic reform when many federal responsibilities were being off loaded to local governments. However, many of these 'Northern' benefits have either been eliminated by newly privatized companies or go unpaid.
- Another aspect of economic transition in Russia that has affected the North has been the opening up of the economy to the outside world and the liberalization of foreign trade. The liberalization of foreign trade allowed some regions to begin to profit enormously from the products they produced, while others suffered greatly because of the uncompetitivness of their output on world markets. Among those Northern regions that benefited were the resource-rich Northern regions of West Siberia where the bulk of Russia's oil and gas are located. The liberalization of foreign trade and travel, combined with domestic price liberalization and privatization, has radically changed the economic geography of the Northern regions. Companies in all regions, including Northern ones, now more-or-less purchase inputs from the cheapest supplier and sell their outputs to the highest bidder, rather than having these decision made administratively by officials in Moscow. For many of the distant Northern regions, this has meant increased foreign trade and a decreased dependence on Moscow and the rest of central Russia. Many regions in the Russian Far East are much closer to the Pacific Rim countries such as Japan and Korea, or the West Coast of the United States, than there are to central Russia.
- 6. However, for enterprises in most Northern regions it has become apparent that much economic activity is no longer viable under the new market conditions. Many regions of Russia have suffered during the transition period as there has been an increasing divergence between

those few which have been able to leverage their natural or locational advantages during the transition period and those many which have suffered considerably. Most of the regions in Russia's Northern periphery have suffered more relative to the rest of the country as the Soviet Union promoted a scale of development that is proving not to be viable in a more open, market-oriented society.

- 7. Defining the Russian North: The terms "Russian North", "Siberia", "Arctic region", "Far East" and other terms used to denote the cold, distant, Northern periphery far from Moscow are often used without precisely defining the geographic area under consideration. In fact, there is no uniform definition for most of these terms. One Russian scholar of the Soviet/Russian north characterized the North by the following four criteria: location to the north of long-standing settled and economically developed areas of the country and remoteness from large industrial centers; harsh climatic conditions, which make economic and social development difficult as a result of long winters and permafrost over much of the territory; low population density and a less developed industrial base; and greater expenditure of resources for the exploitation of natural resources than would be required for the exploitation of similar resources farther south. 
  This definition of the North is based upon economic as well as physical criteria, and includes the characteristics of remoteness, in this case remoteness from Moscow and the more populated and developed areas of the country.
- 8. The criteria Slavin laid out are similar to those employed by the Soviet/Russian governments in classifying portions of the country as 'Northern'. For planning, economic development, and other purposes, the Russian government defines two different types of Northern regions, the Far North (*Kraynyy Sever*) and regions equivalent to the Far North (*mestnosti priravnennyye k rayonam Kraynego Severa*). The designation of these regions was for the purpose of setting coefficients for wages and other entitlements as part of a program to recruit workers for tours of northern duty and stimulate economic development of some of the less developed Northern regions.
- 9. According to this definition, the European North and most of the West Siberian, East Siberian, and Far East economic regions were classified as the North. In fact, in the Soviet Union, 49 percent of the country was classified as being in the North or regions equivalent to the

North. The Far North and regions equivalent to the Far North encompass 11,900 thousand square kilometers or 69.7 percent of the entire territory of Russia. As of January 1, 1997, there were 12.1 million persons living in this region representing 8.2 percent of the entire population of the country. Twenty-seven of the 89 subjects of the federation fall partially or total into the Far North or regions equivalent to the Far North (see table 4).

- 10. One difficulty with any definition of the North based upon physical or climatic criteria is that the boundaries of such a region cut across administrative boundaries and most economic and social statistics are presented at the oblast-level, i.e. at the level of the 89 subjects of the federation. There are few sets of data presented for the Far North and equivalent regions, and to construct a comprehensive set of data for analysis would require additional processing.<sup>2</sup> For this reason, when constructing a 'Russian North' for an analysis that employs large amounts of economic and social data as this study of migration issues does, it is preferable to either wholly include or exclude a region, so as not to cut across administrative boundaries. The North that will be examined in this study consists of 16 regions or subjects of the federation. These are the 10 regions that fall entirely into the Far North, the five regions that are split between the Far North and regions equivalent to the Far North, the Khanty-Mansiy Autonomous Okrug, and the city of Norilsk. Norilsk is physically located in the Taymyr Okrug, which is included in the definition of the North here, but administratively part of the Krasnoyarsk Kray, which is not part of the definition of the North to be used in the study. This restricted definition of the North makes up 57 percent of Russia's territory and contains 8,945 thousand persons or 6.1 percent of the total population (as of January 1, 1999). The justification for the selection of these regions for the study is that it is from these Northern regions that migration has been most acute during Russia's economic transition.
- 11. Comparison between the Russian North and other Northern regions: Russia is one of eight 'Northern' countries in the world. These are countries where all or parts of their territories lie north of 60 degrees north latitude. The other countries or regions include the state of Alaska

<sup>&</sup>lt;sup>1</sup> V.S. Slavin, *The Soviet North: Present Development and Future Prospects*, Moscow: Progress Publishers, 1972 as cited in Bradshaw, Michael J, "The Russian North in Transition: General Introduction", *Post-Soviet Geography*, April 1995, pp. 195-203.

<sup>&</sup>lt;sup>2</sup> The most recent Russian statistical yearbook contained a five-page section on the Far North and regions equivalent to the Far North, see Goskomstat Rossii, Rossiyskiy statisticheskiy yezhegodnik: statisticheskiy sbornik, Moscow: Logos, pp. 1126-1130. The last complete yearbook on the Far North was issued in 1993, Goskomstat Rossii, Rayony Kraynego Severa i mestnosti, priravnennyye k rayonam Kraynego Severa, v 1992 godu: statisticheskiy sbornik, Moscow: 1993.

in the United States, the Northwest and Yukon Territories of Canada, all of Iceland and Greenland, and the northern regions of Norway, Sweden, and Finland. The internal divisions within each country are used to delineate the regions considered northern. If just the portion of the Russian to be examined in this study is considered 'North', then the Russian 'North' makes up 55 percent of the total northern territory in the world (see table 1). The Canadian North makes up about 22 percent of the total Northern territory, Greenland about 12 percent, and Alaska 9 percent. A point of departure for comparison of these Northern regions is while the Russian North makes up just over half the northern territory, it contains about 80 percent of the total northern population of approximately 11.9 million.

Table 1: Population Density of the Russian North and Comparable Northern Regions

			Density	
	Area		(persons per	
	(ths. sq.	Population	square	Largest urban
Region	kms.)	(ths.)	kilometer)	areas (ths.)
RUSSIAN FEDERATION	17,075.4	147,104.6	8.6	
Far North and equivalent regions	11,900.0	12,105.1	1.0	
The North (as defined in study)	9,734.1	9,098.9	0.9	Murmansk (393.3)
UNITED STATES	9,528	270,299	28.4	
Alaska	1,527	614	0.4	Anchorage (250.5)
CANADA	9,922	30,300	3.1	
Northwest Territories	3,380	68	0.02	Yellownife (18.0)
Yukon Territory	483	32	0.07	Whitehorse (13.0)
GREENLAND (Kalaallit Nunaat)	2,176	56	0.03	Nuuk (Godthab) (12.8)
ICELAND	103	275	2.7	Reykjavik (161.1)
NORWAY	324	4,418	13.6	
Nord-Trondelag	22	127	5.7	Steinkjaer (10.3)
Norland	38	239	6.2	Bodo (33.0)
Troms	26	150	5.8	Tromso (47.1)
Finnmark	49	75	1.5	Vadso (less than 8.0)
SWEDEN	450	8,900	19.8	
Norrbotten	106	267	2.5	Lulea (42.7)
Vasterbotten	55	258	4.7	Umea (103.1)
FINLAND	338	5,100	15.1	
Oulu	57	453	8.0	Oulu (113.6)
Lapland	99	201	2.0	Rovaniemi (57.0)

Sources and notes:

Russia: The Far North and regions equivalent to the Far North are based upon the GOR's official definition.

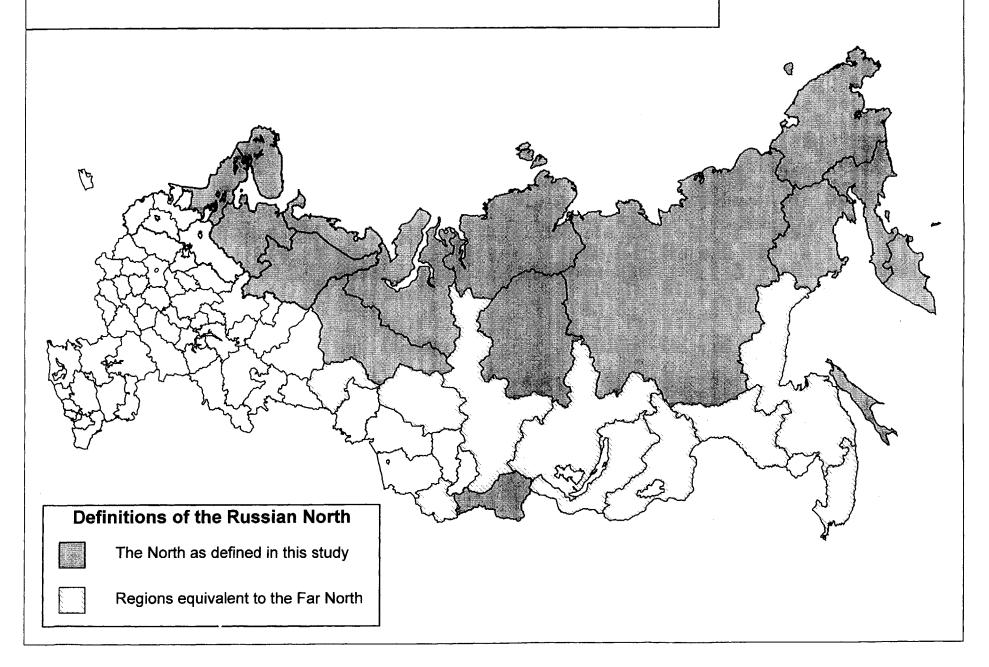
The North, as defined in this study, are the 16 regions included in the study including Norilsk.

- 12. There are about 95 persons per 100 square kilometers in the Russian North, which makes it about two-and-a-half times as densely populated as Alaska. The population density is roughly 50 times that of the Canadian North and Greenland but about a quarter that of the Iceland and the northern portions of the three Scandinavian countries. These latter four are much more hospitable to human habitation because of the moderating influences of the Gulf Stream. This effect partially explains why the largest urban area in the Russian North and its only European ice-free port, Murmansk (393.3 thousand people in 1997), lies near the border with Finland. Altogether, there are 11 cities of over 200 thousand in these northern regions and 10 of them are in Russia. The only sizable Northern city outside of Russia is Anchorage, Alaska with a population of 250 thousand.
- 13. Of course, climatic factors are not the only determinants of the population size and density of the northern regions. The amount and type of natural resources and the economic systems that these northern regions are a part of also plays a factor. Prior to the beginning of the industrialization in the 18th century, most of these northern regions were occupied by scattered indigenous populations engaged in traditional economic activities of reindeer herding, fishing, and whaling. Some of the northern regions contain very few resources of use to industrial economies, while others such as Russia, contains large amounts not just of Russia's but also of the world's known deposits. With the exception of Iceland, all of the Northern regions are periphery regions where development priorities are determined by the core.<sup>3</sup> In the Russian North, "a desire for economic self-sufficiency promoted the development of mineral resources in remote northern regions, a policy made possible by the use of forced labor and a disregard for the real economic, social, and environmental costs of high-latitude industrialization". For the Russian North, one result of the centrally planned economic system where true labor and transport costs were not reflected was an over-population compared to other northern regions even when the greater mineral resources of Russia's North are taken into consideration. The manner in which other countries have developed their Northern peripheries, while still often chaotic, haphazard and with little regard for the environment or the natives peoples of these regions, usually relied upon far less labor resources because the cost of exploitation of these high-latitude regions was more properly reflected.

<sup>&</sup>lt;sup>3</sup> Greenland is a self-governing part of Denmark, that has had limited autonomy since 1979 when Home Rule was instituted.

<sup>&</sup>lt;sup>4</sup> Bradshaw, Michael, "The Russian North in Transition: General Introduction", *Post-Soviet Geography*, April 1995, p. 199.

## Figure 1: The Russian North



#### II. HISTORICAL PATTERNS OF MIGRATION IN THE RUSSIAN NORTH

- 14. History and Development of the Russian North: In order to understand the current population size and distribution in the Russian North, it is useful to briefly review the past settlement patterns of the region, as well as the development policies of the Russian and Soviet governments. Because it was blocked from expanding westward, the Russian Empire began to expand towards the east. After some initial difficulties, it expanded across the Urals and in 1620 accomplished the annexation of West Siberia up to the Yenesi River. At the time, what is now Siberia and the Far East was populated by a small number of indigenous native peoples widely disbursed in small groups throughout the region engaged in reindeer herding, fishing, and other subsistence activities. One estimate puts the total number native population in Siberia and the Far East at 220,000 at the time of first contact with the Russians, which is about the maximum that the territory could support with the given level of technology in the climatic conditions of the region.
- 15. The expansion across Siberia to the Pacific was very rapid, reached in 1643. By 1689, Russia had laid claim to all of Siberia and the Far East north of the Amur River basin. It was a desire for the furs of the animals of Siberia and their rather rapid extermination or depletion that lead to rapid conquest of the territory. The Russians forced many of the natives to pay a *yasak* or tribute in the form of a prescribed number of furs. Russian soon became a major supplier of furs to Europe and Asia, deriving 10 percent of total national income from the sale of the commodity. The impact of the 'conquest' on the lives of many natives was more apparent than real especially in the Far East where distance made direct control difficult. Because of the small numbers of natives in Siberia and the Far East, the migration of Russians caused them to become a demographic minority by 1678, with roughly equal numbers of 150,000 to 200,000 each at the end of the 17th century.
- 16. While the fur trade opened up Siberia, it was the exile system that populated it when exile to Siberia became an official form of punishment in the mid-17th century. At the end of the 17th century, the Siberian resources attracting the Empire's interest switched from furs to iron and copper ores. From the beginning to end of 18th century, the number of Russians living in Siberia increased from 300,000 to perhaps 900,000 and by middle of 19th century to 2.7 million. At the end of the 19<sup>th</sup> and beginning of the 20<sup>th</sup> century, migration to Siberia increased rapidly. In 1861, the serfs were freed and after legal restrictions on their movements were lifted, many

migrated east, often with state assistance. In the 1890s, construction of the Trans-Siberian railroad commenced and this combined with the 1906 reforms turned emigration to Siberia into a flood. From 1897 to 1917, the population of Siberia and the Far East nearly doubled going from 5.8 to 10.6 million persons. As of 1917, the Russian share of Siberia's population was 77.6 percent.

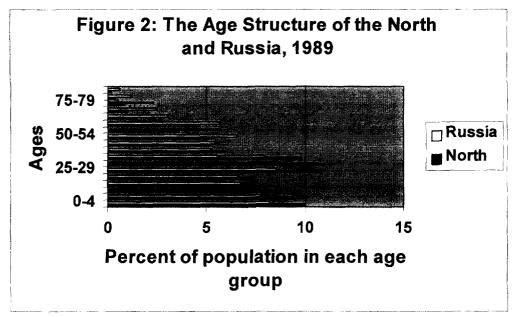
- The 1917 revolution brought about a number of significant changes in the development and population policies of Siberia and the North. The first was the establishment of the various ethno-territorial units based on the homelands of the Siberian indigenous groups. In many cases, especially in the North, this was done to formally give territorial recognition of the ethnic homeland of non-Russian nationalities. In the case of larger ethnic groups, a republic was created (e.g. Yakutiya) and in the cases of smaller groups, an autonomous okrug (eg. Chukotka okrug). This was accompanied by moderate and varying degrees of local autonomy over matters of regional economic development. The Committee on the North was created in 1924 for the purpose of making recommending to state policy makers concerning the development of the various Northern aboriginal peoples. This committee was abolished in 1935 and its tasks assigned to Glavsevmorput' (The Main Administration for the North Sea Route). There were also efforts to give some of these indigenous groups written languages where very few had them before and other efforts to 'modernize' them.
- Northern labor policies during the Soviet period can be broken down into three major overlapping phases. Initially, the industrial and resource enterprises of Siberia and the North were staffed with forced labor. The infamous gulag system was established in 1924 and during its peak in 1937-38, some 7 million persons were sent to the camps. The system was abolished after Stalin's death in 1953. The founding and development of Norilsk, the mining and metallurgical center in northern Siberia, serves as a good example of the various attempts by the Soviet government to provide an adequate labor force to an enterprise in these high latitude regions. Norilsk is one of only 3 urban settlements in the world North of the Arctic Circle with over 100,000 persons (the others are Murmansk and Vorkuta). Copper-nickel ores were discovered in the around Norilsk in 1920 and construction of the Norilsk Mining and Metallurgical Combine began in 1935 with a labor force consisting almost entirely of prisoners. At the time of its establishment in 1933, Glavsevmorput' was responsible for all Northern development but the NKVD (Peoples' Commissariat for Internal Affairs, a predecessor to the KGB) was put in charge of construction in Norilsk.

- 19. It was realized during the first five-year plan (1928-1933) that the special conditions of the Arctic required special development approaches. The establishment of the North Sea route was critical to the development of the North. A supply grid was established with the North Sea Route delivering supplies to the north-south lines of the grid, the major Siberian rivers the Ob-Irtysh, Yenisei, Lena, and Indigirka-Kolyma.
- 20. There was a realization early on in the Soviet period that the development of the Northern regions could not be carried out entirely with convict labor and incentives had to be established for both labor recruitment and labor retention. In 1932, a decree was passed establishing the first northern wage increments (*severnaya nadbavka*). These were incremental increases in wages that built up over time. These were combined with regional wage coefficients, longer period of annual leave entitlements, improved pension rights, and housing privileges. There were different coefficients for different regions of the country with a coefficient of 2.0 for the far northeast corner of the country, which doubled the basic wage. The wage coefficients were designed to compensate for the higher cost of living in the Northern and periphery regions while the wage increments were to reduce turnover since they were cumulative the longer one stayed in the North, the higher was the value of the increment.
- 21. A third phase began when there was the realization that there was a difference between labor recruitment and labor retention to the Northern regions and that northern wage coefficients were not sufficient to solve the retention problem. While the Northern coefficients, coupled with ognabor (organization committees) could recruit a sufficient labor force for priority construction projects as the Baykal-Amur Mainline (BAM) and the opening of the oil and gas fields of the northern Tyumen, these policies were not sufficient to retain the labor force, many of whom left because of the lack of social amenities. In the 1970s, steps were taken to increase housing, medical care, schools, and the social infrastructure in general for those working in the North. These policies did seem to have some influence on increasing the quality of life and reducing labor turnover in the North.
- 22. The cumulative effects of these policies are that Siberia and the Far East's share of the total Russian population over the last century increased from 5.1 of the total population in 1897 to 21.8 percent at the time of the 1989 census. During the Soviet period, the population of Siberia and the Far East tripled from 10.7 million to 32.1 million in 1989, at the same time the population of Russia increased by 64 percent. The population of the Russian North peaked in

1991, just prior to the breakup of the Soviet Union and the onset of economic reforms in Russia. It has declined slightly as a share of the total Russian population since then as the population center of Russia moves westward. How much further it will decline is the subject of this study.

- 23. Composition of the Northern Population Prior to Transition: Analysis of the population of the Northern regions prior to the transition period reveal the effects of past development policies as well as offering insights into possible migration patterns in the future.<sup>5</sup> The 1989 population census was fortuitously conducted just prior to the breakup of the Soviet Union and the beginning of the period of economic reform in Russia, which precipitated much of the out migration from the Northern regions. The following is an overview of the composition of the Northern population by age, sex, nationality, place of birth, length of residency, branch of the economy, level of education, and settlement size.
- 24. Russia has among the lowest ratios of males to females of any country in the world. At the time of the 1989 census, there were 88 males for every 100 females. This is due to the fact that the various demographic disasters during this century have disproportionately affected men and the fact that Russian men have long had a much higher mortality rate than women. Because the Northern regions tend to disproportionally draw men to work in the various industrial sectors, this sex imbalance is overcome so that there were 101 males for every 100 females in the North. The excess of males over females is most pronounced in the young working ages from 15 to 34, where there are 116 males for every 100 females.

The analysis of migration patterns to and from the Russian North in this paper are based upon several different sources of data, all of which originate from Goskomstat Rossii (The State Committee on Statistics of the Russian Federation). These can be broken down into census results, published and unpublished migration data, and survey results. The most recent population census for Russia was conducted in 1989. This was the last census conducted for the USSR. Since 1993, the resident permit (propiska) system has not been in force in Russia except for certain large metropolitan areas. However, persons moving to a new location are still required to register such moves at the place of origin and destination. As a result, data on the migrants age, sex, educational level, place of origin and destination are recorded and are rather complete. In addition, two surveys were conducted, one of recent migrants from the North and the other of potential migrants who remained in the North. The survey of approximately 600 recent migrants asked questions about motivations for moving to the North originally, living standards while in the North, reasons for leaving, the actual migration process, adaptation to the new environment, and any assistance received in the migration process. The survey of 2,000 potential Northern migrants (pensioners, unemployed, disabled, and students) in four Northern regions contained questions about desire to leave the North, current living conditions, and impediments to migrating.



- 25. The vast differences in the age structure between the Northern regions and Russia as whole can be clearly seen in the age-sex pyramids of both in 1989 (figure 2). The most noticeable difference in the pyramid of the North is the large bulge in the young working ages from 20 to 39. These are the ages where people were attracted to inducements to move to the North and work for a period of time in order to accumulate sufficient savings. Many would leave the North before or at retirement ages, which explains why the pension-age population was only 8.8 of the total in the North versus 18.5 percent for all of Russia in 1989. The average age of the Russian population in 1989 was 35 while in the North it was much younger. In the Khanty-Mansiy and Yamal-Nenets okrugs where young workers were recruited to work in the oil and gas regions, the average age was only 26.
- 26. Eleven of the sixteen regions in the study are ethnic homelands of indigenous peoples of North or Siberia. Four of these are republics that are the titular areas of some of the larger Northern or Siberian groups the Karelians, Komi, Yakuts, and Tuvans and seven are the homelands of the smaller-numbered 'Peoples of the North' (*malochislenny narod Severa*). Due to centuries of in migration of Russians and other Slavic groups, these indigenous groups have long ceased to be the majority in the North or Siberia and even in their ethnic homelands. Though Russians comprise a majority of the North's population, 71 percent in 1989 (see table 2), because

<sup>&</sup>lt;sup>6</sup> Males over 59 and females over 54.

of the larger number of Ukrainians and Belarussians, as well as the indigenous Northern and Siberian nationalities, this share is smaller than in Russia as a whole, where they comprised 82 percent of the population in 1989. Ukrainians and Belarussians together made up 11.3 percent of the North's population in 1989, the four major indigenous groups 10.7 percent, the small-numbered Peoples of the North only 1.9 percent. The ethnic composition of each Northern region has implications for migration patterns following the breakup of the Soviet Union and the devolution of economic development planning to regional authorities.

Table 2: The Ethnic Composition of the Regions of the Far North, 1989

			Percent
Region	Nationality	Number	Distribution
Russia	All nationalities	147,021,869	100.0
	Russian	119,865,946	81.5
	Ukrainian	4,362,872	3.0
	Belarussian	1,206,222	0.8
	Other FSU state titular nationalities	2,217,729	1.5
	Tatars	5,522,096	3.8
	Bashkirs	1,345,273	0.9
	Germans	842,295	0.6
	Jews	536,848	0.4
	Major ethnic groups of Siberia and the North	1,047,632	0.7
	Yakuts	380,242	0.3
	Komi	336,309	0.2
	Tuvans	206,160	0.1
	Karelians	124,921	0.1
	Small-Numbered Peoples of the North	181,517	0.1
	Other nationalities	9,893,439	6.7
The North	All nationalities	9,773,491	100.0
	Russian	6,926,750	70.9
	Ukrainian	784,701	8.0
	Belarussian	221,744	2.3
	Other FSU state titular nationalities	75,875	0.8
•	Tatars	213,834	2.2
	Bashkirs	49,096	0.5
	Germans	35,569	0.4
	Jews	4,416	0.0
	Major ethnic groups of Siberia and the North	1,047,632	10.7
	Yakuts	380,242	3.9
	Komi	336,309	3.4
	Tuvans	206,160	2.1
	Karelians	124,921	1.3
	Small-Numbered Peoples of the North	181,517	1.9
	Other nationalities	232,367	2.4

Sources and notes:

CIS Statistical Committee & East View Publications, 1989 USSR Population Census CD-ROM

- 27. The Russian share of the population of the Northern regions ranges from a high of 92 percent in the Archangelsk oblast to a low of 32 percent in the Tuva republic. Tuva shows up as an outlier as this is the only case where Russians do not constitute the majority of the population. The region where Russians constitute the second lowest share is Yakutiya where in 1989 they made up barely a majority of the population with 50.3 percent of the population. The Ukrainian shares of four Northern regions the Khanty-Mansiys, Yamal-Nenets, and Chukotka okrugs, and the Magadan oblast were between 12 and 19 percent. From these regions then it would not be surprising if there were high rates of out migration following the breakup of the Soviet Union as these groups fled to their ethnic homelands fearing the loss of benefits and other privileges.
- 28. Of the four larger ethnic groups, only the Tuvans constitute a majority in their homeland, making up 64 percent of the Tuva republic. The next highest share are the Yakuts who were one-third of the total of Yakutiya, a figure that has likely increased since then. There are 26 ethnic groups classified as small-numbered 'Peoples of the North'. All together these groups number only 182 thousand making up less than 2 percent of the entire Northern population. Even more so than the larger Northern and Siberian ethnic groups, these smaller nationalities continue to engage in traditional Northern economic activities of reindeer heading, fishing, and whaling and show even less propensity to migrate outside the North. There are some that would argue that it is these groups who have been most severally affected by the migration and the overall withdrawal of subsidies from the North. Like indigenous Northern peoples elsewhere in the world, a system of welfare-like dependence was created for these people that is no longer sustained and they are often ill-equipped to participate in the modern economy or the areas they used for traditional activities have been badly polluted as a result of excessive industrialization of the North.
- 29. The Russian North is a region of newcomers and people who were born elsewhere. An overview of the Northern population by place of birth and length of residency is a useful barometer of both their possible propensity to migrate as well as their possible destination choices. There are two aspects of migration theory that are useful for this analysis. The first is that people who migrate once are more likely to migrate again. The second is that people tend to migrate to places where they already have established social and economic ties. While all people who moved to the North from other regions of Russia or outside of Russia cannot necessarily be expected to return to their places of birth, many of them will given that many will have friends, family, and social networks developed in these regions.

- 30. About half of the total population of Russia (48.8 percent) were born in the region that they currently live in while barely a third of the North population (36.5 percent) were born in the Northern region they were residing at the time of the 1989 census (table 3). The oil and gas regions of Tyumen, the Khanty-Mansiy and Yamal-Nenets Okrugs have the smallest local-born populations, with only 27.5 and 24.1 percent of the populations being born in these regions. The Chukotka Okrug and Magadan Oblast also stood with barely a quarter of their populations being born in those regions. It should not be surprising then that these regions had the highest rates of out migration of the Northern regions during the transition period. Of those not living in the region they were born, the North also has a much higher share of their population recently arrived than the rest of the country. In Russia, of those not living in the region they were born, 14.4 percent have arrived within the past five years whereas in the North, a quarter (24.7 percent) have lived in the North less than five years. Khanty-Mansiy and Yamal-Nenets Okrugs again stand out with the large portion of new arrivals, where 41.8 and 50.8 percent of the population had arrived within the past five years.
- 31. One interesting and telling characteristic of the place of birth of the Northern population is the large number who were born outside of Russia, especially in Ukraine and Belarus. In 1989, 15.2 percent of the Northern population was born outside the country, double the share for all Russia of 7.1 percent. Ukraine and Belarus were large suppliers of skilled industrial labor for Northern development projects. The same four regions show up with large foreign-born populations. The Khanty-Mansiy and Yamal-Nenets Okrugs, Magadan oblast, and Chukotka Okrug all had between 23 and 30 percent of populations who were born outside of Russia. In the Yamal-Nenets and Chukotka Okrugs and Magadan oblast, one in five persons were born in Ukraine.
- 32. Of those who migrate to the North from elsewhere in Russia, they came from a variety of source regions with only a few sending noticeably larger numbers than others did. The Vologda oblast, which is the only oblast-level unit in the North economic region that is not considered to be part of the Far North or equivalents regions, the Krasnodar Kray, Bashkortostan, and Sverdlovsk are areas where 100,000 or more persons living in the Far North were born.

Table 3: Population of the Russian North by Place of Birth and Length of Residency, 1989

	Number o	f persons	Perc	ent
	Russia	The North	Russia	The North
Population by Place of Birth				<del></del>
Total population, 1989	147,021,869	9,773,491	100.0	100.0
Former Soviet Union	146,027,781	9,721,197	99.3	99.5
Russia	135,549,786	8,238,541	92.2	84.3
Far North and equiv. Regions	21,581,040	5,456,234	14.7	55.8
Far North	6,825,500	4,503,684	4.6	46.1
Equivalent regions	14,755,540	952,550	10.0	9.7
Outside the North	113,968,746	2,782,307	77.5	28.5
Other FSU	10,477,995	1,482,656	7.1	15.2
Ukraine	4,595,811	858,804	3.1	8.8
Belarus	1,408,619	204,521	1.0	2.1
Other	4,473,565	419,331	3.0	4.3
Outside FSU or unknown	994,088	52,294	0.7	0.5
Population by Length of Residency				
Total population, 1989	147,021,869	9,773,491	100.0	100.0
Number who have lived continuosly in region since birth	71,768,212	3,571,384	48.8	36.5
Number who have not lived continuouly in region since birth	75,253,657	6,202,107	51.2	63.5
Less than one year	5,394,057	534,194	3.7	5.5
1 year	3,901,508	416,765	2.7	4.3
2 years	3,555,296	437,654	2.4	4.5
3 years	3,175,905	387,362	2.2	4.0
4 years	2,754,736	339,674	1.9	3.5
5 years	2,455,800	299,271	1.7	3.1
6-9 years	8,884,421	1,002,047	6.0	10.3
10-14 years	9,018,714	795,327	6.1	8.1
15-19 years	7,830,697	572,086	5.3	5.9
20 or more years	28,282,523	1,417,727	19.2	14.5

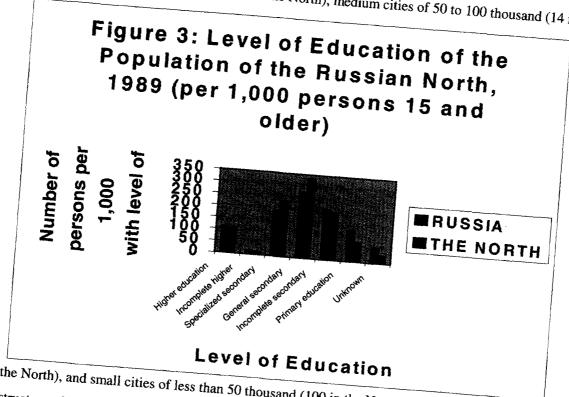
Sources and notes:

CIS Statistical Committee and East View Publications, 1989 USSR Population Census, CD-ROM.

33. Figure 3 shows the level of education of the population of the Russian North compared to the country as a whole. The differences in the educational levels of the Northern population are due mainly to the age and occupational structure of the region. There are about the same number of persons with higher education in the North than the rest of the country but many more persons with both general and specialized secondary education. Presumably, many persons with this level of education, especially in a technical field, are drawn to work in the various industries that the Northern regions specialize in. There are far fewer persons with either an incomplete secondary education or just a primary schools education as Northern enterprises could be more

selective in their recruitment of workers. There are several Northern regions such as Murmansk, Chukotka, Kamchatka, and Magadan where the number of persons with higher education far exceeds the national average.

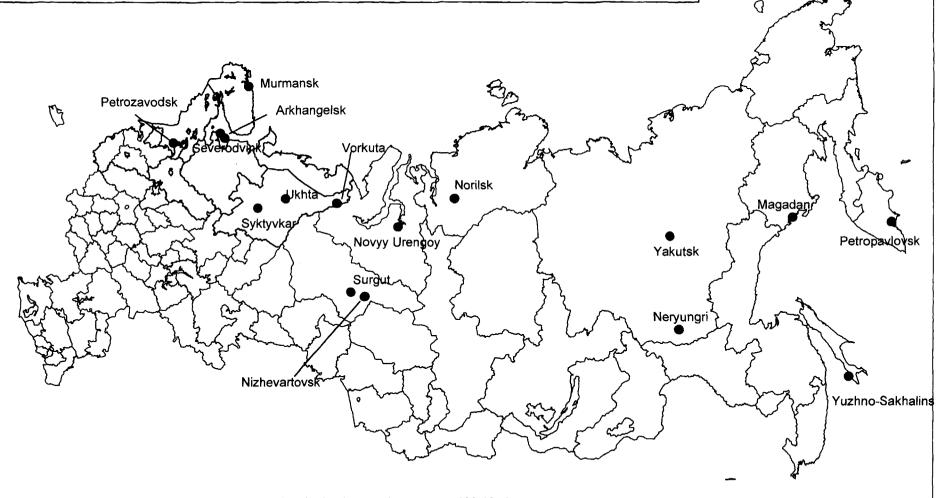
As of January 1, 1998, the population of the Russian North was disbursed among 168 rural rayons and 413 urban centers. Of the urban centers, 125 are cities (gorod) and 282 are small towns (poselok gorodskogo tipa)<sup>7</sup>. Together, these groups comprise the urban population. The remainder of the Northern population lives in 1,391 rural settlements. Cities are further broken down into major metropolitan cities with over 500,000 (of which there are none in the North), large cities of 100 to 500 thousand (13 in the North), medium cities of 50 to 100 thousand (14 in



the North), and small cities of less than 50 thousand (100 in the North). Due to the economic structure of the North, based upon the extractive industries and the lack of possibilities for agriculture, the North is more urban than the rest of the country. Seventy-nine percent of the Northern population resides in urban areas as opposed to 73 percent for Russia as a whole. Among the regions in the North, there is considerable variation in the share of the population

<sup>&</sup>lt;sup>7</sup> Urban settlements include populated areas with 12 thousand or more persons and where 85 or more percent of the population consists of workers, employees, and other family members. All other populated areas are considered rural.

Figure 4: The Largest Northern Cities, 1991 Urban Settlements with Over 100,000 Persons



Note: The sixteen cities shown are those in the North with populations over 100,000 in 1991. Forty percent of the entire Northern population lives in these sixteen urban areas.

living in urban areas based upon whether there are larger, urban settlements usually centered around resource extraction. The Evenki and Koryak Okrugs not only have small populations, they have no settlements classified as cities and consequently, the percent of the populations of these two regions living in urban areas is 24.5 and 30.0 percent respectively. On the opposite extreme are regions such as Murmansk, Khanty-Mansiy, Magadan, and Sakhalin that contain large urban agglomerations where 85 percent or more of the population resides.

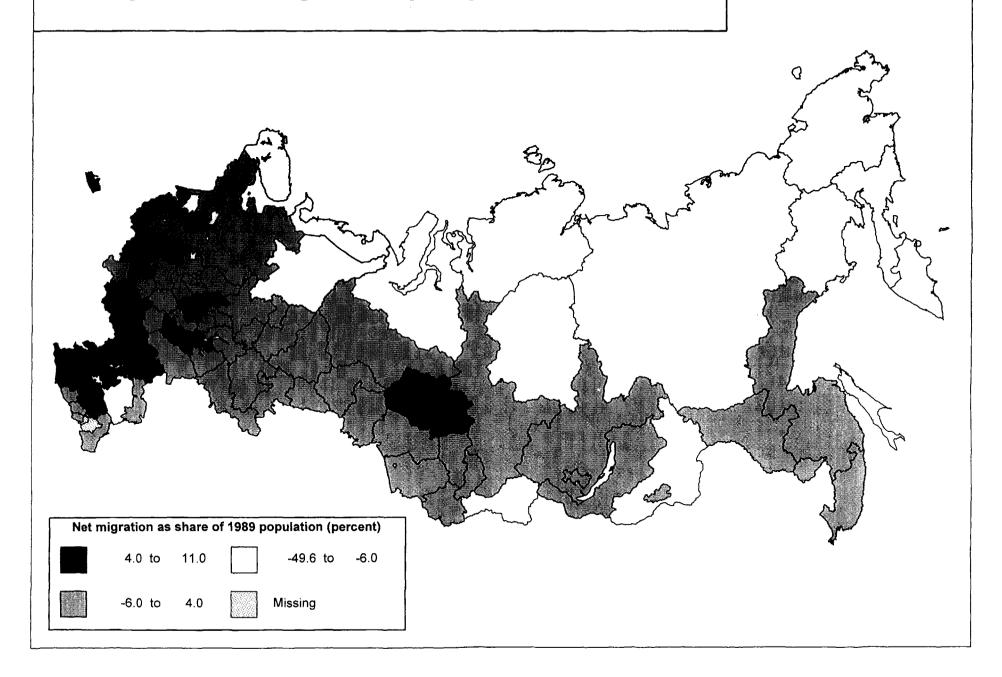
- 35. In 1991, when the population of the North peaked, there were eleven Northern cities with over a quarter-million persons, the largest being Murmansk with 472,900 persons (figure 4). Roughly a third of the population of the Russian North were concentrated in these eleven settlements. Many of the settlements in the Russian North are classified as "one-company" towns or more specifically, monopoly-industrial enterprises (*promyshlennyy predpriyatiya-monopolista*). The North, with 6.6 percent of the population, contains 14.5 percent of those enterprises where more than half of industrial employment is concentrated in one enterprise and 19 percent where more than 80 percent of industrial workers in a town are in one enterprise.
- 36. Many of these are enterprises in the primary sectors based upon the extraction of resources located in the North. In Karelia and Arkhangel'sk in the European North and in Sakhalin, in the Far East, most of the monopoly enterprises are timber and wood processing. In the west Siberian regions of Khanty-Mansysk and Yamal-Nenets and eastern portion of the Komi Republic, the monopoly enterprises are based on fuels extraction and processing. There are numerous monopoly enterprises scattered across the North based upon the extraction of minerals and precious metals. There are several others along the Northern and Far East coastal areas where fishing and fish processing industries predominate as the monopoly enterprises.
- 37. Most of the largest Northern settlements described above fall into this category of having just 1 or 2 monopoly enterprise where the bulk of the industrial workforce was employed. These include Arkhangel'sk, where a third of all industrial workers are employed in one forestry and woodworking enterprise, Petropavlovsk-Kamchatskiy, the capital of the Kamchatka Oblast where 60 percent of the industrial workforce is employed in one fish processing plant and Norilsk where over 80 percent of industrial workers are employed by the Norilsk Industrial Concern.
- 38. Migration in Russia and the Russian North during Transition: The recent trend of migration out of the Russian North during the 1990s should be viewed against the backdrop of past migration patterns in the Soviet Union and the migration and population trends of the post-

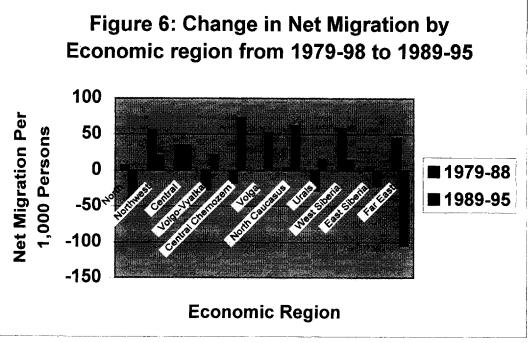
Soviet period. For much of the Soviet period, and in fact for centuries prior to the creation of the Soviet Union, the predominant migration pattern was out from the central core of Russian settlement in present-day European Russia. Russians and other mobile ethnic groups migrated south to Central Asia and the Caucasus, west toward to Ukraine, northeast towards the Baltics, and north and west into Siberia. During the Soviet period, this migration became more deliberate and state-sponsored when industrial workers and administrators were needed to staff the newly acquired and industrializing periphery regions. The trend of out-migration from Russia to the non-Russian states of the FSU reversed itself in the mid-1970s when more Russians left the southern tier states than went to these regions.

- 39. However, internally within Russia, the pattern of migration from central Russia to the periphery regions in the North and Siberia persisted through the 1980s. During the 1980s, only three of the eleven larger economic regions in Russia were experiencing out migration the Volga-Vytaka, Central Chernozem, and Urals.<sup>8</sup> All others had positive rates of net migration, partially due to the fact that Russia overall was experiencing immigration. During this period, West Siberia and the Far East had two of the three highest rates of in-migration of the eleven economic regions.
- 40. The breakup of the Soviet Union and the concomitant economic reforms and decentralization had a dramatic impact on these migration patterns, as well as other demographic trends. Beginning in 1992, return migration from the former Soviet Union to Russia increased dramatically. It peaked in 1994 when over a million persons migrated from the non-Russian states. Return migration to Russia has slowed considerably since then, so that in 1996 net migration to Russia was less than half of what it was at its peak in 1994. The breakup of the Soviet Union then accelerated the return of Russians and other nationalities from Central Asia and the Transcaucasus and reversed the pattern of out-migration to the Baltics and other western FSU states. By 1994, Russia was the only FSU state to have positive net migration.

<sup>&</sup>lt;sup>8</sup> The 89 'subjects of the federation' are grouped into eleven economic regions. These units are a remnant of the central planning period and served as the basis for regionally planning the economy. They currently serve no administrative function. Data for 89 regions are grouped into these eleven economic regions in statistical and other publications and are often referred to because of the more manageable number.

Figure 5: Net Migration by Region, 1989-1997





- 41. The pattern of migration out of the North and return migration from the non-Russian states can really be seen as two different manifestations of the same migration stream a return migration to the central core of population settlement in European Russia. Though there were signs of migration from the periphery regions in the late 1980s and early 1990s, this migration began in earnest in 1992 when prices were liberalized and the devolution process from the central to regional government began (figure 5). Further investigation of the causes of migration is presented below. It appears that population mobility during transition in Russia has declined due to the hardships of the transition. The number of people moving declined from 6.3 per hundred people in 1988 to 3.0 in 1994. The reason for the large population declines in a period of reduced migration turnover in regions such as those in the North are that those who are leaving are not replaced by newcomers as was the case in the past.
- 42. As can be clearly seen in figure 6, from the 1980s to the 1990s, eight of Russia' eleven economic regions reversed their direction of net migration (from positive to negative or viceversa). The Volga-Vytaka, Central Chernozem, Volga, and Urals shifted from net out-migration to net in-migration and the North, East Siberia, West Siberia, and the Far East all periphery regions shifted from being net recipients of migrants to net donors. For example, the Far East region went from experiencing the third highest rate of net in-migration of any economic region during the 1980s (4.5 per thousand) to having by far the highest rate of out-migration (-10.5 per thousand during 1989-1995). Whereas in the past, the number coming to the Far East slightly

exceeded the number leaving, in the 1990s, three people left the region for every one who arrived.

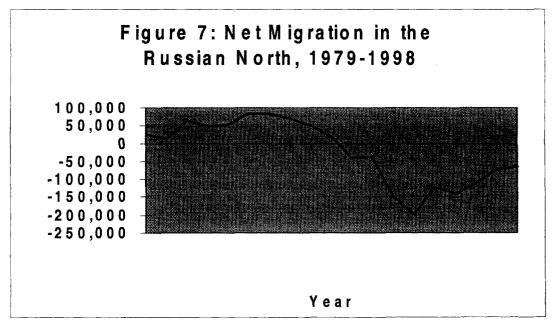
Overall from 1989 to 1998, the population of Russia stayed practically the same with the excess of deaths over births being matched by the return migration to Russia. Over this period, half (44 of 89) the regions of Russia experienced population declines. The causes of the decline varied among the different areas of the country. Regions in the more densely populated, western portion of the country experience population declines because of highly negative rates of natural increase while those in the peripheral regions in the North, Siberia, and the Far East experienced declines because of out-migration. The following table shows the dichotomous population change trend between the North and non-North regions of Russia over the period 1989-1998:

(thousands)	Russia	North	Non-North
Total population change	-296	-690	394
Natural increase	-3,224	223	-3,447
Migration	2,928	-913	3,841

The population of the Russian North, as defined in this study, peaked in 1991 at 9,826 44. thousand at which time this represented 6.6 percent of the entire Russian population. Between 1989 and 1999 the population of North has declined by 7.9 percent (see table 4). The North unlike Russia, has had more births than deaths over this period, so the net out-migration has been even larger than the overall population decline. Since 1989, over one of every ten persons representing 10.2 percent of the population or a total of nearly a million persons has left the North. Only two regions in the North (the Karelian Republic and the Khanty-Mansiy Okrug) experienced in-migration, all of the other Northern regions had out-migration, in most cases rather substantial out-migration. Ten of the sixteen regions had had out-migration of over 10 percent of their 1989 populations. Eight of these regions had between 10 and 20 percent of their populations leave. In the far northeast corner of Russia, over a third of the population of Magadan and half of the population of Chukotka choose migration as a strategy of adaptation to changing circumstances. The peak year of out-migration from the North was 1992, the year the Soviet Union broke up and prices were liberalized in Russia, and the beginning of the period of fiscal decentralization (figure 7). In that year, there was a net out-migration of 200 thousand persons from the North. Migration from the North continues but in 1996 had slowed to one-third of what is in 1992. However, net migration to the North had been slowing down since peaking in the mid-1980s. The mid-1980s were the period of economic liberalization instituted by

Gorbachev. It was also when academics, as well as policy-makers, began to question the massive levels of investment devoted to the Northern regions.

45. Analysis of data on in and out-migration to and from the North reveal some interesting trends (data are available for the period 1993 to 1996). While the net migration (the difference between in migration and out migration) from the North has declined since peaking in 1992, the number of people going to the North has increased slightly, much of this driven by the migration trends between the North and the non-Russian states of the FSU. The ratio of those leaving the North to those arriving in the North has declined, from 1.72 departures per arrival in 1993 to 1.39 in 1996. While this hardly approaches the pre-transition situation in the North where there were



more people coming to the region than leaving it, the trend is in the direction of a zero migration balance. The net migration exchange between the North and other regions of Russia was roughly the same in 1996 as it was in 1993. There has been a large increase of persons coming to the North from other regions of Russia but an equally large increase in the number departing for the materik.<sup>9</sup>

<sup>&</sup>lt;sup>9</sup> The term *materik* means mainland in Russian and is often used by those in the North to refer to the non-Northern regions of the country in manner similar to that which Alaskans refer to the 'lower 48' or 'outside'.

Table 4: Population Trends in the Russian North, 1989-1999 (beginning-of-year; in thousands)

	Total por	oulation	on Percent change, 1989-1999				Absolute change, 1989-1999		
				Natural			natural		
Region	1989	1999	Total	Increase	migration	Total	increase	migration	
RUSSIAN FEDERATION	147,401	146,693	-0.5	-2.7	2.2	-707	-3,929	3,222	
The North	9,711	8,945	-7.9	2.4	-10.2	-766	229	-995	
Karelian Republic	791	772	-2.4	-3.1	0.8	-19	-25	6	
Komi Republic	1,261	1,149	-8.9	0.8	-9.6	-112	10	-121	
Arkhangel'sk Oblast	1,570	1,479	-5.8	-2.0	-3.8	-91	-32	-60	
Nenets Autonomous Okrug *	55	46	-15.6	4.5	-20.2	-9	2	-11	
Murmansk Oblast	1,147	1,000	-12.8	0.5	-13.3	-147	6	-153	
Khanty-Mansiy Aut. Okrug *	1,268	1,370	8.0	7.0	1.0	102	89	13	
Yamal-Nenets Aut. Okrug *	486	498	2.5	8.9	-6.4	12	43	-31	
Tuva Republic	309	311	0.7	9.8	-9.1	2	30	-28	
Taymyr Autonomous Okrug *	55	44	-20.7	4.3	-25.0	-11	2	-14	
Evenki Autonomous Okrug *	24	19	-20.8	5.6	-26.4	-5	1	-6	
Sakha Republic (Yakutia)	1,081	989	-8.6	7.9	-16.5	-93	86	-178	
Chukotka Autonomous Okrug	157	77	-51.1	4.3	-55.5	-80	7	-87	
Kamchatka Oblast	466	390	-16.3	1.6	-17.9	-76	8	-83	
Koryak Autonomous Okrug *	39	30	-22.6	2.6	-25.1	-9	1	-10	
Magadan Oblast	386	240	-37.9	1.9	-39.8	-146	7	-153	
Sakhalin Oblast	710	608	-14.4	-0.6	-13.8	-102	-4	-98	
<b>Equivalent Regions</b>	17,637	17,538	-0.6	0.9	-1.4	-99	153	-252	
Perm' Oblast **	3,100	2,979	-3.9	-2.1	-1.8	-121	-66	-55	
Komi-Permyak Aut. Okrug *	160	153	-4.6	-1.3	-3.3	-7	-2	-5	
Altay Republic	192	204	6.2	3.9	2.3	12	8	4	
Tomsk Oblast	1,002	1,072	7.0	-1.2	8.2	70	-12	82	
Tyumen' Oblast	3,081	3,226	4.7	4.1	0.6	145	126	19	
Buryat Republic	1,041	1,041	0.0	2.9	-2.9	0	30	-30	
Krasnoyarsk Kray	3,027	3,063	1.2	-0.9	2.1	36	-26	63	
Irkutsk Oblast	2,831	2,764	-2.4	0.2	-2.6	-67	6	-73	
Chita Oblast	1,378	1,269	-7.9	2.4	-10.3	-109	33	-143	
Primorskiy Kray	2,258	2,197	-2.7	-0.7	-2.0	-62	-16	-46	
Khabarovsk Kray	1,609	1,534	-4.7	-0.4	-4.3	-75	-6	-69	
Amur Oblast	1,058	1,015	-4.0	1.2	-5.2	-43	12	-55	

Sources and notes:

Data based upon annual Goskomstat data for the population, births, and deaths for each region. Net migration computed via residual method.

46. In 1993 (and probably also in 1992 and earlier) people were simply leaving the North for other regions of Russia of other FSU countries. Many of those going to the non-Russian states were titular members of those states worried about not being able to obtain citizenship or other benefits if they stayed in Russia. Keep in mind that roughly 11 percent of the population of the

<sup>&</sup>quot;The North" as defined here are the sixteen regions designated as such in the study. "Equivalent regions" are those regions that fall partly into regions equivalent to the Far North as designated by the Russian government.

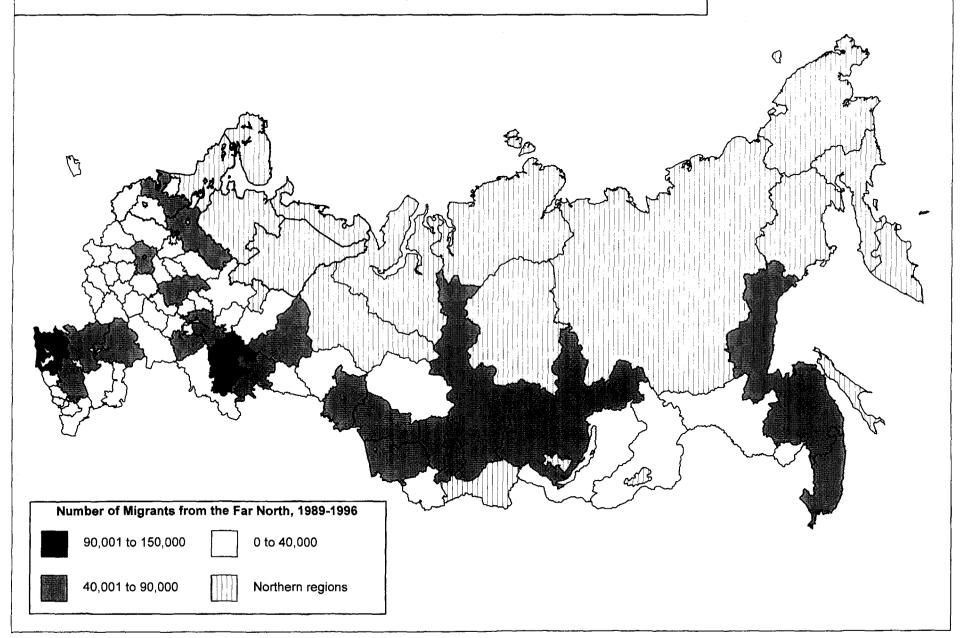
<sup>\*</sup> Data for these areas also included in larger geographic unit which they are part of.

<sup>\*\*</sup> Data for the Perm Oblast are not included in the totals for equivalent regions.

North were Ukrainians or Belarussians and in some regions, their share of the population was close to 20 percent. The migration exchange between the North and foreign countries reversed itself in 1994, when 46 thousand more people arrived in the North from the non-FSU states than departed to them. The exchange has remained positive ever since. The number arriving in the North from the other states has remained somewhat constant but the number leaving the North to the non-Russian regions of the FSU has declined in half between 1993 and 1996. Overall during the period, more people have arrived in the North from each FSU country than have left with two exceptions, Ukraine and Belarus.

- By 1996, nearly all sixteen regions had the same direction of migration exchange with the non-Russian states and the rest of Russia, albeit at varying levels. All but one had overall out migration (Karelia had roughly the same number of arrivals as departures), all had out migration to the rest of Russia, and all but two (Chukotka and Sakhalin) had in migration from the non-Russian states. Just two regions, the Khanty-Mansiy and Yamal-Nenets okrugs in west Siberia accounted for 60 percent of the total net in-migration to the North in 1996. The migration turnover rate (the percent of all persons who move) has remained relatively constant in the North with the exception of these two regions where it has increased dramatically. There has been a large increase in the number of persons who are both arriving to these regions as well as leaving. One possible explanation is that with the amount of both foreign and domestic investment in these two regions (as well as World Bank loans) perhaps the labor force is restructuring resulting in increased turnover.
- This includes only those migrants who have left the Far North as defined in this study and does not include those who have migrate to another location in the same oblast-level unit or those who have moved to another Northern region. There were a total of 2,350,918 persons who migrated from these Northern regions to other regions of Russia between 1989 and 1996. Regions where there was a concentration of Northern migrants (over 40,000 between 1989 and 1996) were along the southern border of Siberia, in the regions bordering the European North (the Vologda and Leningrad oblasts and St. Petersburg), and in several oblast along the Volga and in the North Caucasus.

Figure 8: Destination Regions of Migrants from the Far North, 1989-1996



- 49. Three regions received over 90,000 Northern migrants over this period (figure 8). The Krasnodar Kray in the North Caucasus received the most Northern migrants, 148 thousand or 6.3 percent of the total. During the transition period, this region has become a magnet for those migrants returning from the 'near abroad' following the breakup of the Soviet Union as well as for migrants from other regions of Russia, including from the Northern regions. St. Petersburg received the second largest number of Northern migrants. This is not surprising for a number of reasons, one is the simple gravity effect of being the country's second largest city and the second is that it is a Northern city itself (the 60<sup>th</sup> north parallel runs directly through the city) and is located in close proximity to the European North. Bashkortostan also was also the destination choice of over 90,000 Northern migrants. In 1989, there were nearly 50,000 Bashkirs and a total of 171,000 persons who were born in Bashkortostan living in the North. There were a further 21 regions that received between 40,000 and 90,000 Northern migrants. The remaining 45, non-Northern regions received less than 40,000.
- 50. The urban population in the North declined by 5.4 percent while the rural population declined by just 1 percent, which is not surprising. There are four primary reasons for this: the majority of the Northern population and economic activity is concentrated in urban areas; the decline in natural increase in Russia has disproportionally affected urban populations; the rural population in the North is primarily composed of indigenous peoples who are unlikely to move; and the overall withdrawal of subsidies to the Northern regions has disproportional affected urban populations.
- 51. While there was overall population decline in the North there was considerable variation among the sixteen oblast-level units in the study in the size of this decline over the period 1989 to 1999. These ranged from the Khanty-Mansiy Okrug, which actually grew by 8.0 percent to the Chukotka Okrug which, declined by 51.1 percent. At the lower geographic level of rayons and urban settlements, there is even further variation. Unfortunately, at this level there is less data to correlate population change and migration with. In fact, it is difficult to compile a comprehensive data set that allows population change to be disaggregated into natural increase and migration. At the one extreme are several rayons that lost half or more of their populations between 1991 and 1997. Most of these are rather small, rural rayons in Magadan, Chukotka, or Yakutiya. There are numerous small settlements scattered throughout the North, whose economic base is extremely tenuous in the new conditions. For instance, of the forty-three monopoly towns in the North, 80 percent of them have lost population since 1991. Of the twenty-seven with over half of industrial

employment in one branch, all but three showed population declines. The compilation of a list of all Northern settlements and analysis of the underlying economic conditions of these would require further research but would be extremely useful for the policy implications it would provide. The Russian State Committee for Northern Development (Goskomsever) has already begun work on analysis of this type.

- 52. The settlement or rayon of any size that showed the largest population decline was Petropavlovsk-Kamchatskiy, the capital of the Kamchakta oblast, where the population declined by a quarter, going from 284,900 in 1991 to 210,100 in 1998 (table 5). The economy of the city is based upon fishing and fish processing and 60 percent of industrial employment is concentrated in one fish processing plant. There were several large urban settlements in the Northern that actually showed rather considerable population increases. Of the sixteen largest urban settlements in the North, a quarter of them actually had populations increases -Petrozavodsk, (Karelian Republic), Syktyvkar, (Komi Republic), Surgut (Khanti-Mansiy Okrug), and Yuzhno-Sakhalinsk, (Sakhalin). Yuzhno-Sakhalinsk, the oblast center of Sakhalin, oblast is an interesting case it grew by 9 percent between 1991 and 1997, the most of any of the large Northern cities. The oblast as whole declined by 11.7 percent, all entirely due to out-migration. The population of every other rayon and city in Sahkalin except the oblast center, declined in population over this period. The region as a whole is the cite of considerable investment in its onshore and offshore oil reserves and presumably the majority of this is generating jobs and population growth in the capital only.
- Surgut is the center of much of the oil exploration taking place in the Khanty-Mansiy Okrug. Petrozavodsk is the oblast center of Karelia, the only Northern region to have net immigration over the period. It has a more diverse economy based upon machine building. Syktyvkar, the oblast center of the Komi region, also has a more diverse economy than other large Northern urban centers and may be a destination region for some of the out-migration from Vorkuta, the coal region located in the Northern portion of the region, which has lost 17 percent of its population. The population of the largest Northern city in Russia, Murmansk, declined by 16.6 percent between 1991 and 1997. The economy of the city rests on fishing and fish processing, some mineral exploration, and is home to the North Sea Fleet. Archangelsk lost about 12 percent of its population over this period. Magadan city, in the Far East, lost just over one in five persons. The city was founded in the 1930s to support the Kolyma mining activities and was once one of the harshest and deadliest forced labor camps in the Soviet penal system.

Table 5: Population Change in the Cities Over 100,000 in the Russian North, 1991-1998

	Total popula	tion	Percent	Absolute change	
	(thousand	s)	Change,		
City (Region)	1991	1998	1991-98	(thousands)	
Murmansk (Murmansk)	472.9	388.3	-17.9	-84.6	
Arkhangel'sk (Arkhangel'sk)	428.2	375.4	-12.3	-52.8	
Petropavlovsk-Kamchatskiy (Kamchatka)	284.9	210.1	-26.3	-74.8	
Petrozavodsk (Karelia)	278.2	282.8	1.7	4.6	
Noril'sk (Krasnoyarsk) *	264.7	245.7	-7.2	-19.0	
Surgut (Khanty-Mansiy Aut. Okrug)	261.1	274.8	5.2	13.7	
Severodvinsk (Arkhangelsk)	254.1	236.2	-7.0	-17.9	
Nizhnevartovsk (Khanty-Mansiy Aut. Okrug)	247.4	235.7	-4.7	-11.7	
Syktyvkar (Komi Republic)	240.0	247.6	3.2	7.6	
Yakutsk (Sakha Republic)	225.2	225.5	0.1	0.3	
Vorkuta (Komi Republic)	216.8	175.8	-18.9	-41.0	
Yuzhno-Sakhalinsk (Sakhalin)	172.9	187.8	8.6	14.9	
Magadan (Magadan)	166.8	130.4	-21.8	-36.4	
Ukhta (Komi Republic)	141.9	129.6	-8.7	-12.3	
Neryungri (Sakha Republic)	121.2	108.6	-10.4	-12.6	
Novyy Urengoy (Yamal-Nenets Aut. Okrug)	105.5	99.5	-5.7	-6.0	

Sources and notes:

1991 population figures: Goskomstat RSFSR, Chislennost' naseleniya RSFSR po gorodam, Rabochim poselkam i rayonam na 1 yanvarya 1991 population figures: Goskomstat Rossii Chislennost' naseleniya Rossiyskoy Federatsii po gorodam, poselkam gorodskogo tipa i rayonam na 1 yanvarya 1998 g., Moscow: 1998. Data are for the present (nalichnoye) population. Some of the population changes may be the result of annexations or de-annexations. It cannot be Determined in every case whether there was a change in rayon or city boundaries over the time period.

54. The breakup of the Soviet Union and the economic transition has spurred a number of large migration streams among and within the fifteen successor states. Table 6 shows the relative size of the migration from the North in comparison to other major post-Soviet migration streams in Russia. The data show that migration from the North during the period from 1989 to 1996 was larger than any of the return migration streams to Russia from the other FSU states. Each of the migration streams needs to be put into context by the counter stream of people moving in the opposite direction. The migration from the western FSU (Ukraine, Belarus, and Moldova) was nearly as large as the migration from the North but balanced by a migration nearly as large from Russia to these states. The return migration from the remaining states back to Russia was more

<sup>\*</sup> Norilsk is physically located in the Taymyr Autonomous Okrug but administratively subordinate to the Krasnoyarsk Kray.

unidirectional. There were four people who left from the Central Asian states (excluding Kazakhstan) and the Transcaucasus for every one person who went from Russia to these states. Data on both and immigration and out-migration for a shorter period for the North which show that from 1993 to 1996, for every three people leaving the North, there were two who migrated to the North. The out-migration from the North represents about a quarter of the 1989 population but as was mentioned is being replaced by a large counter stream of people moving to the Northern regions. For the years where data are available, the ratio of those leaving to those migrating to the North has been declining.

Table 6: Major Migration Streams in Russia, 1989-96

	Size of migration stream (thousands)				
Migration stream	Stream	Counter stream	Net migration		
Russian North to 'Mainland'	2,351		••		
Out of the Russian North, 1993-1996	1,165	775	-389		
Return migration to Russia	6,927	3,496	3,431		
Kazakhstan to Russia	1,585	604	982		
Central Asia to Russia	1,636	408	1,228		
Transcaucasus to Russia	1,061	279	782		
Baltics to Russia	311	90	222		
Western FSU to Russia	2,333	2,116	217		
From Russia to 'Far Abroad'	769	3_	-766		

Sources and notes:

Migration out of the Russian North comprises migration out of the Northern regions and includes migration to the rest of Russia, the other FSU states, and outside the FSU. Return migration to Russia consists of migration from the 14 non-Russian states of the former Soviet Union to Russia. The western FSU consists of Ukraine, Belarus, and Moldova.

Data on migration between Russia and the other FSU states is from Goskomstat Rossii, Demograficheskiy yezhegodnik Rossii, 1997, pp. 504-507.

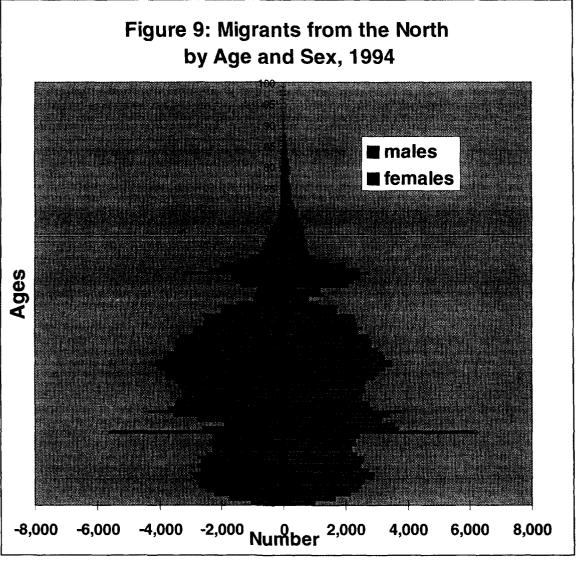
Migration data for the Russian North are from the following sources:

1993: Goskomstat Rossii, Demograficheskiy yezhegodnik Rossiyskoy Federatsii 1993, 1994, pp. 384-399. 1994: Goskomstat Rossii, Demograficheskiy yezhegodnik Rossiyskoy Federatsii, 1995, pp. 404-415. 1995: Goskomstat Rossii, Chislennost'i migratsiya naseleniya Rossiyskoy Federatsii v 1995 g. Statisticheskiy byulleten', Moscow: 1996, pp. 28-41. 1996: Goskomstat Rossii, Chislennost'i migratsiya naseleniya Rossiyskoy Federatsii v 1996 g. Statisticheskiy byulleten', Moscow: 1997, pp. 28-41.

55. Profile of Northern Migrants and Mechanisms for Migration from the North: The discussion above showed that while there has been overall out-migration from the North over the past several years, that there has been a great deal of variation among regions as to the magnitude of this migration, ranging from out-migration of over half the population in Chukotka to a very small amount of net in-migration in Karelia. There has also been considerable variation among demographic and social groups in the recent Northern migration, similar to migrations streams

found elsewhere. The selectivity of migration from the North has consequences for the migrants themselves and their ability to adapt in the regions they have migrated to, the recipient regions, and for the demographic and social structures of the regions in the North they have left behind. The composition of the migrant groups will also have an impact on the Russian government's policy towards assistance to others wishing to leave the North. As will be shown below, there are significant differences among social groups as to how they undertook the actual migration process. This section analyzes the age-sex composition and educational levels of recent Northern migrants, the mechanisms that these migrants used, their adaptation to their new environments, and their opinions about the migration process itself.

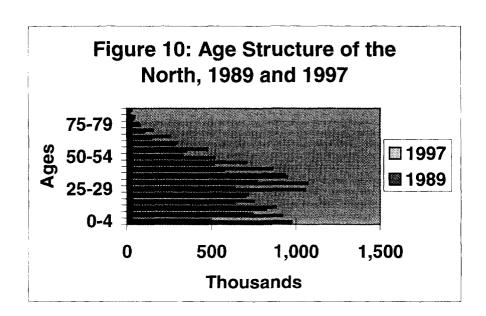
- This section is based upon two main sources of data. The first are detailed data for the period 1994 to 1996 on the demographic and social characteristics of migrants from the North obtained from Goskomstat Russia which break down the Northern migration streams over this period by age, sex, and educational level. The second source of data was a survey that was done of approximately 600 recent Northern migrants in four recipient regions.
- 57. The age-sex structure of migrants from the North for 1994 shown in figure 9 reveal several large bulges indicating age groups with large numbers of people leaving. There is a large group of people centered on the retirement age of 55 which should not be surprising for migration in general nor recent Northern migration trends. People often move at retirement ages to places other than where they worked a majority of their careers. There is a large bulge centered on age 33, the middle of the prime working ages. There is a smaller bulge around age 6, which presumably represents the children of this working-age group that is leaving. There is also a large spike at ages 17-18, the age at which most Russian children complete their compulsory schooling. Much of this is due to the lack of higher educational facilities in the North where those who want can complete their schooling.



58. More revealing than the figures on gross out-migrants are those on net migration by age (the difference between those coming to the North and those leaving). Again the spike around ages 17-18 indicate that many more people of these ages are leaving than coming to the North. The only ages where there is positive net migration to the North are between ages 19 and 23. These are young workers who are just completing their specialized secondary or higher schooling and are typically in their first professional jobs. Moving up the age structure, migration turns negative again at age 24 and deepens with the same bulge around age 33 as seen in the figure of gross out-migrants from the North. There is the same bulge of out-migrants around the retirement age of 55. Migration continues to be negative moving up the age structure although less dramatically so because of the lesser number of total migrants in the higher ages. What is not

known is how this age structure of net migration to the North in 1994 differed from that before 1988 when the net migration to the North was positive.

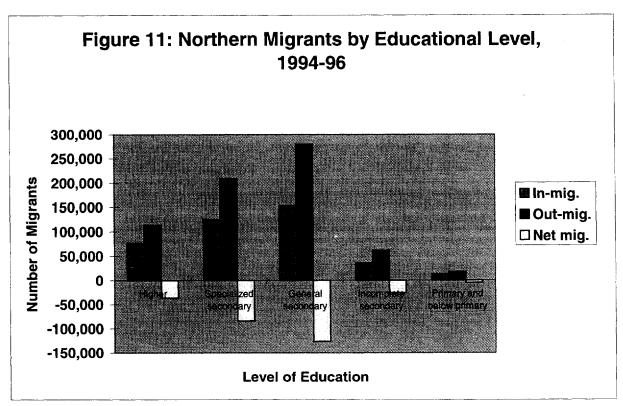
59. The effects of this age-specific out migration can clearly be seen by comparing the age structures both before (1989) and after (1997) the large outflows (figure 10). Overall, the North had a population decline of 6.3 percent between 1989 and 1997. There are far fewer young children below age 10 and young adults between the ages of 25 and 40 in 1997 than in 1989. There has been a large increase in the number of those in the young retirement ages and smaller increases in the older ages. The number of children below age 10 in the North has declined by 35 percent. The share that this cohort constituted of the population declined from 19.4 to 13.5 percent of the population. The number of young adults between 25 and 39 declined by 24 percent and their share of the population fell from 31.5 percent to 25.6 percent. On a broader level, the number of school-age persons has declined by 29 percent. The working-age population fell by 15 percent and the retirement age population increased by 9 percent over the past eight years, indicating that there is a significant build up of retirement age persons who would like to leave but are not able to do so.



60. The number of those in the early retirement ages, 55 to 59, increased by 35 percent, those 65 to 69 increased by 74 percent, and those 70 to 74 by 55 percent. A very small portion of these increases are attributable to an aging of the population but what they most clearly point to is the system of assisting people to move out of the North upon retirement has clearly broken down.

Savings have been wiped out by inflation and budget-supported benefits for moving and transport assistance and the purchase of a flat in the mainland upon retirement are seldom paid.

As figure 11 clearly shows the number of people leaving the North exceeds the number coming to the North at every educational level. Given that the Northern regions experienced overall out migration over the period, the question is whether this migration was disproportionally of the more educated population -- and the answer is yes. Thus, the Northern regions are clearly losing educated people in disproportionate numbers. It is those with higher education, presumably those more skilled and knowledgeable, who are using migration as an adaptation strategy and who have the means to be able to move. Only the ratio of departures to



arrivals of those with a primary education is less than the overall ratio, indicating that the less educated are either less inclined or less able to migrate. The pattern of disproportionate numbers of educated people leaving the North persisted, in varying degrees, among regions. In Northern regions of high out-migration such as Chukotka and Madagan, there were four to five persons with higher or specialized secondary education leaving for each person with comparable education arriving.

62. A source of detailed micro data on recent migrants from the North was a survey commissioned of such people in four recipient regions - Pskov, Rostov, Bashkortostan, and Novosibirsk. The survey consisted of 130 questions to 581 people who migrated from the North over the period 1992 to 1997. Questions were asked about basic demographic characteristics, motivation for moving to the North originally, life while living in the North, reasons for leaving, the actual migration process, adaptation to the new environment, and any assistance received in the migration process. Assessments were also made of the environment in the recipient regions and attitudes of local officials towards migrants. This section summarizes the main findings of that survey and its implications. <sup>10</sup>

Table 7: Main reasons to leave the North (max. three answers possible)

We always viewed our stay in the North as	29	9	33	14	41
temporary					
Became senseless to stay in the North	27	29	27	3	41
Wanted to get back to our native place, relatives,	23	6	28	21	42
friends		******************************			
State of health deteriorated	19	17	20	20	43
(respondent/respondent's family)					
The Northern climate is too bad	19	19	19	15	42
I (my relatives) retired	15	12	16	14	51
To obtain education, give education to the	14	31	11	23	32
children					
Salary/benefit package became insufficient to	12	8	13	24	41
live on	_	_			
Lost the job because of closing or downsizing of	10	7	11	23	41
the company	6	15	8	9	38
Family reasons			0		
Relatives/friends/acquaintances already	6	9	5	25	38
migrated from the North and had a positive					
experience	_	4	e e	9	41
Lost the job for professional reasons	5		5	,	*1
Solve housing problem	4	11	3	-	
Total	N=582	N=85	N=491	N=	

63. The major difficulty in conducting the survey was in finding respondents partly because of the lack of a centralized register of Northern migrants. Thus, the sample does not pretend to be a perfect sample of recent Northern migrants but is fairly representative. The age structure of the sample versus macro data on the age of Northern migrants matches very closely. The sample is slightly skewed away from persons with higher education and towards persons with a specialized

<sup>&</sup>lt;sup>10</sup> A more detailed discussion of the findings and more complete results of the survey can be found in the main report and append of Netherlands Economic Institute, Migration from the Russian North: Profile, mechanisms of migration and adjustment in recipient regions, Rotterdam, Moscow: May 1998.

secondary education. The geographic distribution of migrants according to the Northern regions they departed from is fairly close but obviously does not match exactly the macro migration data.

- 64. Not surprisingly, over half (52 percent) of respondents went to the North originally in order to earn money. Most of the people in the sample (84 percent) were not born in the North, and went there during the period when there was a program of privileges guaranteed by the state (and funded) for Northern migrants. Another third, mostly females, went along with their spouses or parents. Thus, the desire to accumulate savings or connection to a family member with that desire prompted the vast majority of Northern migrants. The motivation given by the next largest group of respondents was romanticism or a desire to see the world (13 percent).
- The decline in extra-monetary rewards for the hardships of living in the North in the major reason persons in the sample left. Reasons such as "it became senseless to stay in the North", a desire to return 'home', or the fact that most never viewed staying in the North as permanent predominated the responses of those who have left recently (table 7). Enterprise closings or downsizing were cited by 10 percent of respondents, significant but not as high as expected. Even among Northern 'natives', who would presumably view the region as their home, the futility of living there was a predominant response. This group, the desire to obtain education for themselves or their children was the most common response. This is not surprising given the lack of educational facilities in the North. This accounts for the large spike in the age pyramid of Northern migrants around ages 17-18, when people complete their compulsory schooling. Among the four recipient regions, the share of those wanting to return to ones native place was highest those in Baskhortostan, the ethnic homeland of the Bashkirs. This result is not surprising given the strong pull of natives towards their ethnic regions within the Russian Federation.
- 66. The pull factors for destination choice of the Northern migrants in the sample are presented in table 8. The choices were usually not random as most moved to either the region they were born or places where they had relatives or friends already living. About half of

<sup>11</sup> The term 'natives' in this case refers to persons born in the North, not members of the Northern titular groups. Only 6 persons, or 1 percent, of the sample were members of Northern ethnic groups. Seventy-two percent of the sample were Russians, followed by Tatars (12 percent), and Bashkirs (7.4 percent). Ukrainians (4 percent) and Belarussians (0.9 percent) made up much smaller shares of the sample of Northern migrants than their respective shares of the Northern population because presumably many returned to their ethnic homelands outside of Russia.

respondents were born in the region they moved to. An interesting note is the fact almost none (1.5 percent) of the migrants who moved to their native region participated in an organized migration program (more on these below). An indication that assistance programs for Northern migrants fails to take into account location preferences.

Table 8: Reasons for choice of place of settlement (N=582)

the party of process with the contract of the	Total	Restor	Hike	Spiritoritetal	Normalianic
Our parents, relatives, friends live (lived) here	62	51	64	76	56
(3)					
I lived here in my childhood, before moving to	21	22	14	33	13
the North (4)					
Climate, environment are good here (10)	20	27	31	15	10
A dwelling was reserved here (5)	16	13	11	24	14
Our acquaintances have a good opinion of this	10	8	6	5	21
place (2)					
Housing here is not expensive, managed to buy	8	8	8	5	10
it at a reasonable price (8)					
Re-settlement here was organised by our	7	23	6	0	0
company (7)					
Managed to obtain here a free dwelling (6)	7	8	9	5	6
We were provided with a job here (1)	6	6	7	7	3
Conditions for keeping a farmer household, a	6	11	7	3	1
farm are favourable here (11)					
We came here practically by chance (12)	4	4	4	3	6

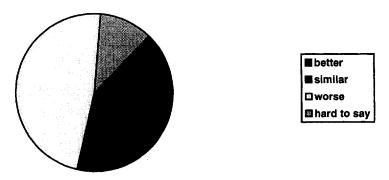
One of the most interesting findings in the survey, which is indicative of both the labor and housing markets in Russia, is the sequences of actions the sample of migrants undertake when moving. About two-thirds of migrants (62 percent) first found a dwelling and then a job (table 9). Only 7 percent found a job first, followed by a place to live. Another 11 percent did both simultaneously. Given the tightness in the housing market in Russia, most viewed this as the major obstacle rather than employment. This sequence of actions has consequences for the situation migrants find themselves in following their move. On a macro level, this indicates that at least the Northern migration under study is not redistributing labor efficiently because of the impediments of housing shortages across Russia.

Table 9: Sequence of actions when choosing where to move

The second of a called Application of the second second	Pencacaje
first found a dwelling, then a job	62
at the same time found a job and a dwelling	11
first found a job, then a dwelling	7
Found a dwelling but not a job (until now)	6
for family reasons (came to relatives, parents)	4
Entered some educational institution	3
Other	8
Total	100

Migrants were asked a series of subjective and objective questions about their situation 68. both before and after migration. Nearly half consider their present general situation to be worse than their situation before migration (figure 12). One-third considers their situation to be the same, and only 11 percent indicate that they are better off after migration. Prior to migrating, over 90 percent of respondents indicate that they either lived without limiting themselves (29.6 percent), initially lived well but then their material situation worsened (33.3 percent), or had enough to purchase all necessities (29.9 percent). Following migration, the situation had worsened with 42.3 percent indicating that they could afford only necessities, 28.7 percent stating that they had only enough for food, and 15.8 saying that they could hardly make ends meet. Evaluations of migrants well-being are obviously influenced by economic development in Russia in general, where real incomes fell precipitously over the period since 1992, and the period when they migrated. Recent migrants tended to be a little less negative about their situation than those who moved in 1992-1994. Overall, most (57 percent) are happy or very happy that they moved. Only 10 percent regret their decision to move and another 11 percent had rather not moved. Over seventy percent of the respondents stated that they would almost certainly not migrate again. However, one rather curious result was that of those who said that they would migrate again, the largest share, nearly 40 percent, indicate that they would remigrate to the North.

Figure 12: Evaluation of general situation after migration (N123)



69. The housing situation of recent Northern migrants seems comparable to that while they lived in the North, with roughly equal thirds indicating that their current housing was better, similar, and worse than what they had in the North. It is the labor market situation of recent migrants that shows the largest decline. About 90 percent of respondents held permanent jobs while in the North, while only 60 percent held jobs at the time of the interviews. Another 18

percent are looking for work, and 22 percent are out of the labor force. This indicates an unemployment rate of about 22.7 percent for the sample group, a rate much higher than that in the recipient regions and in Russia overall. The fact that the unemployment rates are higher than the local rates should not be surprising given the sequence of actions undertaken in the migration process, finding housing first followed by a job search. The fact that they are that much higher probably is surprising given that this cohort tends to be more educated and skilled than the general population.

Table 10: Working population by economic activity before and after migration (in percentage of working population)

Mining	17	2
fuel and energy production	7	4
Ferrous and non-ferrous metals production	3	-
Chemical and oil refining industry	4	3
Mechanical engineering	1	1
light and food industry	5	4
Construction	10	10
Agriculture and forestry	2	8
Transportation and communication	9	7
Utilities and services	4	7
trade, mediation, public catering, procurement	13	23
Education, health care, etc.	15	16
army, police, security	5	7
Administration bodies, banking, public inst.	2	7
Private services (cleaning, child care, etc.)	1	2
Total (number of cases)	100 (N=534)	100 (N=35Z)

70. Of those who have found work, there are significant occupational and structural shifts, which are not surprising given the different structures of the economies of the North versus the recipient regions. Overall, about half of the workers have the same kind of job after moving that they held before migration. When the present job differs from the position held in the North, the majority indicates that they are working below their capabilities. There was a large decline in the number that worked as managers (top or medium) or highly-skilled specialists and an increase in the number working as entrepreneurs (table 10). Again, some of this trend can be attributed to the overall increase in entrepreneurial opportunities in the country and some to more opportunities in the mainland than what existed in the North. The average company size the respondents presently work in versus that which they worked in while in the North has declined considerably. As table 10 shows, the structure of employment of migrants has changed reflecting the relative different structure of the Northern economy based on primary extraction versus the economies of the

recipient regions. Employment in mining, energy, and metal production showed large declines while employment by migrants in trade, catering, services, and agriculture increased.

71. Of those in the sample, only 7 percent participated in a migration program. Those who participated in a migration program tended to be older, less educated, and more often female than so-called spontaneous migrants (table 11). The major reasons cited for non-participation were lack of awareness (54 percent), and a preference to move on their own (29 percent). Once included in the programs, the benefits tended to be rather substantial including a place to move to, a dwelling when the migrants arrived there, transport of goods, necessary documentation, and in about half the cases, cash assistance. The waiting lists for the programs tended to be relatively short (about half did not have a waiting list, while another 30 waited less than 6 months) but the eligibility criteria for getting into the programs tended to be rather strict discouraging many from even applying. About a third of the programs were for re-settlement of pensioners from the North, a quarter programs associated with the liquidation of settlements and 13 percent were programs of Norilsk Mining and Metallurgical Combine. Given the small sample, it is impossible to evaluate individual programs but overall the results were mixed with equal thirds expressing satisfaction, dissatisfaction, or no opinion of the migration assistance programs.

Table 11: Characteristics of migrants, organised versus spontaneous.

Average age (in years)	47.4	39.6	40.2
Percentage female	63.4	53.5	54.2
Percentage employed in North	92.7	89.4	89.6
Percentage under secondary education (1, 2 or 3 on N7)	14.6	6.5 (a)	<b>7.1</b>
Average year of departure	1995.3	1994.9	1994.9
Total (number of cases)	100 (N=41)	100 (N=540)	100 (N=581)

72. Overall, Northern migrants constitute rather small portions of the total migrants to the recipient regions, on average about 13 percent, thus their impact on any region should be rather minimal. There are differences among the four recipient regions in the survey as there among all regions in the Russian 'mainland'. Pskov, in Northwest Russia, tends to be a rather depressed region with much a higher unemployment rate than the other regions. During the transition period, Rostov in the North Caucasus, along with neighboring Krasnodar and Stavropol are being magnets for migrants from the North, elsewhere in Russia, and immigrants from the non-Russian states. Bashkortostan is, of course, the ethnic homeland of the Bashkirs with the ethnic composition being 40 percent Russian and 22 percent Bashkir. Novosibirsk is the largest city in

Siberia. Attitudes of local officials towards migrants from the North, and elsewhere, have to do with the economic situation in the region, whether migrants are seen as a boom or burden on the local economy, and whether migrants are seen as compensating for the negative natural increase being experienced across Russia and in all of the recipient regions. According to site visits and discussions with officials in all four regions, those in Pskov and Novosibirsk claim to be open and accommodating to migrants, while those in Rostov and Bashkortostan tend to be rather negative about receiving migrants. Respondents confirm these official attitudes when asked about their treatment by local authorities.

- 73. What Caused the Mass Migration from the North?: To this point, much of the analysis of post-Soviet, Northern migration trends has been rather descriptive. This section turns to analysis of what caused this large-scale migration from the North at a time when the country was attempting to make the transformation away from a centrally planned to a market economy. As will be shown, the recent patterns of Northern migration are rather predicable when analyzed against migration theory. Obviously events such as a country attempting to make the transition away from central planning and the appearance of new states created out of previously existing ones are not factors that migration theory has had to previously incorporate. However, when these trends and the influences that they have had on the Northern regions and the people living in them are broken down into their component elements, not much of the migration from the North should have come as a surprise.
- This is not the same as saying that, in 1991, the leadership of the newly independent Russian state planned or was even aware that by instituting the various elements of a market economy would have the effect of depopulating the country's Northern periphery. For the entire period of the Soviet Union's existence, the population of the Russian North was growing in both absolute terms and as a share of the country's population. When Russia became independent in 1992, the government initiated a number of processes transforming the economy towards one based on market principles. These included liberalization of prices, privatization of many sectors of the economy, reduction of government subsidies, and the opening of the country to foreign trade and investment. One unintended by-product of these initiatives was to start a large-scale migration from the North. Economies and societies are far too complex to foresee all of the influences that policies undertaken by national governments will have. When the planks of a market economy were being put in place by the Russian government, there was probably nobody who foresaw the effect this would have on the Northern regions.

- 75. There are a number of complimentary theories that explain the migration process. Most of these are expansions on the so-called push-pull theories put forward by Ravenstein describing migration in late 19<sup>th</sup> century England. Some people are pushed out of the region they are living for various reasons and then are pulled towards somewhere else, in an effort to improve their standard of living. The potential migrants perform a cost-benefit analysis by weighing the push and pull factors and move if the benefits of doing so exceed the costs. If the perceived income in other locations exceed the benefits in the present location by more than the cost of making the move, the person is likely to migrate, incorporating all costs including monetary, opportunity, and psychic. As will be shown, what drove much of the rapid migration from the North was that the variables in this cost-benefit calculation changed rather quickly when the transition period began.
- 76. There are intervening obstacles that may inhibit migration. These include the cost of moving, legal barriers, and distance to destination. The latter is derived from gravity models of migration that states that the quantity of migration between two places decreases as the distance between two locations increases. The general theory states that as the transportation and technology advance, the frictional effect of distance decreases, presumably because the cost of distance has decreased. The opposite must also be true and is evident in present-day Russia and especially in distant Northern regions as the cost of transportation has increased dramatically with the withdrawals of subsidies to the transport sector. The various migration theories conceptualize the process that individuals go through, the characteristics of regions, and why some tend to be areas of large out-migration and others magnets for in-migration, and the effects that regions have on individuals. These theories are useful for assessing the possible future levels of migration from the Russian North.
- 77. Most of the internal migration that occurred during the Soviet period was rather predicable according to theory and there was not a unique 'Soviet' or 'centrally planned' migration system underway. There were however, a few exceptions to standard theory, especially migration to the periphery regions of the Soviet Union, such as the North. Simple gravity models and gravity models with a few extensions predict much of the migration flows that occurred in the Soviet Union. When variables for investment and service sector amenities were added, the explanatory values of the models increased considerably. However, migration flows to East

<sup>&</sup>lt;sup>12</sup> Mitchneck, Beth A., "Geographical and Economic Determinants of Interregional Migration in the USSR", *Soviet Geography*, March 1991, pp. 168-189.

Siberia and the Far East exceeded their predicted values in the models. This was likely due to two factors. One was their distance from other population centers in Russia and the fact that subsidized transportation costs did not cause as much 'friction' on distance as theorized. The second was that the Northern coefficients, which were great inducements to migrate, were not properly reflected in the models. The high wage rate paid in these regions was not reflective of higher labor productivity but was a political incentive. These areas were also recipients of priority investment. Thus, the population redistribution policies pursued by the Soviet government were effective, though not necessarily efficient, causing excess labor supply in many Northern regions. As real wages in the North move closer to those in the south, labor flows from the region can be expected, and are in fact occurring. The full employment policy pursued by the Soviet government also retarded the influence that regional employment changes might have otherwise had on migration outside of a workers' place of residence.

78. Certain groups have a higher degree of *migratability* - their propensity to use migration as a strategy of adaptation is higher than others. People in certain cultures or countries have a much higher degree of mobility than others. People in the United States, Canada, Australia, and New Zealand, which are countries composed of migrants, tend to have rather high degrees of mobility. Countries like the Soviet Union/Russia tended to have much lower mobility rates for a variety of cultural and social reasons. However, within the Soviet Union, there were certain ethnic groups that had a much higher propensity to migrate than others. Among the mobile ethnic groups were Russians, Ukrainians, Jews, and Tatars. 14 It was these groups who comprised the mass migration during the Soviet period to the non-Russian states and to the periphery areas within Russia such as the North and Siberia. Ethnic groups such as most Central Asian nationalities, most of those groups with homelands in the Soviet Union, and the titular groups of Siberia and the North, tended to have rather low mobility rates. It is the Russians and other Slavic groups who are leaving the North in the largest numbers. According to the survey of recent migrants from the North, 72 percent were Russian and 77 percent were Slavic. In 1989, their shares of the total Northern population were 71 and 81 percent respectively. Also in the survey, only 6 of 600 were members of either the ethnic groups indigenous to the North or Siberia, or these only 1 was a member of the 'small-numbered peoples of the North'. The

<sup>&</sup>lt;sup>13</sup> Kumo, Kazuhiro, "Economic System Conversion and Migration Transition in Russia", review of urban and regional development studies, 9 (1997), pp. 20-36.

<sup>&</sup>lt;sup>14</sup> Lewis, Robert A., Richard H. Rowland, and Ralph S. Clem, *Nationality and Population Change in Russia and the USSR: An Evaluation of Census Data, 1897-1970*, Praeger Publishers, Inc. 1970

expectation is that any further out-migration from the North will be composed primarily of these groups that have already left and that most members of the indigenous groups will remain.

- 79. There is also migration selectivity by age, educational level, and level of urbanization. In most societies, young adults are far more likely to migrate than people are at other ages. More educated people have a higher likelihood of migrating than those less educated. People living in urban areas tend to migrate more than rural residents. This can be clearly seen in data on migrants to the North, as well as on recent migrants from the North. Because the North is predominantly a region of newcomers, the age structure was skewed towards persons in the younger ages. On average, the Northern population was also more educated than Russia as a whole. The percent of the Northern population living in urban areas is higher than the share for Russia. The urban population in the North is a predominantly highly educated, Slavic one working in industry, while the rural population trends to be less educated, indigenous, and pursuing traditional livelihoods. When the migration from the North began in large numbers in the early 1990s, it was the highly educated, young adults, living in urban areas who made up the majority of the streams. Left behind were less educated and older people, who have a lower migration propensity. There is considerable variation in the number of times a person moves within his or her lifetime. A small number of people tend to make up a disproportionate amount of the migration, while others never move. Once a person has used migration as a coping strategy, they are more likely to use it again.
- 80. Even if the propensity and desire to migrate exist, the opportunity structure must also be present. Even if the push factors in the region of residence are strong, the pull factors in possible recipient regions must also exist such as job opportunities, adequate housing, and other amenities. The shortage of housing in Russia has long been cited as a barrier to mobility. This partly explains why so many of the surveyed migrants looked for housing first and then a job, not vice-versa as is the case in other countries with more well-functioning housing markets. The amount of information a person has about the comparative advantages of moving also contributes to their decision. Lacking sufficient information about possible destinations will make people less likely to move as this represents an unknown in their cost-benefit analysis. The lack of sufficient information about possible destinations has been cited as barrier to migration from the North, as well in Russia in general. Other variables unique to Northern migration that act as barriers are the enormous distances involved and the rising cost of transportation that has resulted from the price liberalization in Russia. It is the largest country in the world and many

Northern regions are quite distant from population centers in central Russia where many would like to migrate to.

- 81. What characteristics about the Northern regions changed so rapidly and drastically that caused so many people to 'vote with their feet' and leave when Russia began its transition to a market economy in the early 1990s? Some of the answer lies in the data shown in table 12 which shows various economic, investment, labor market, and income characteristics of the Northern regions versus Russia as a whole. In nominal terms, the per capita gross regional product (GRP) of the Northern regions is above that of Russia as a whole. However, when the GRP is deflated by the minimum subsistence level to account for cost-of-living differences among regions, only three Northern regions have a GRP above the national average, and two of these have a portion of their territories outside the North. The only region that lies entirely in the North with a GRP above the national average is the Komi Republic.
- 82. In the 1980s, because of government development policies towards the North, people were moving towards regions which were generally less profitable. In 1995, industrial enterprises in only 3 of the 14 Northern regions, for which data are available, had profitability rates higher than the national average, and two of these were small, sparsely populated regions, the Koryak and Evenki Autonomous Okrugs. The share of loss-making enterprises in the North is much higher than in the rest of the country, 53 percent in the North in 1997 versus 43 percent for Russia. Only 3 of 18 Northern regions had a share loss-making enterprises lower than the national average, and again two of these were small autonomous okrugs. These facts have obvious labor market and migration implications. The data on investment do not portray a favorable outlook for future prospects for the North either. Overall in Russia, investment has fallen by half between 1992 and 1996 and in every single Northern region for which data are available, the decline in investment has been larger than the national average. According to migration theory, migration typically follows investment as it usually translates into increased employment after a lag period. It was shown above that in the Soviet period, labor migration was responsive to investment. It is no surprise that the opposite should be true now that investment levels in the North have declined so dramatically. In 10 of the 16 Northern regions, the share of investment generated by enterprises own funds is less than the national average. In all except the oil and gas regions of West Siberia and Yakutia the share of investment coming from the federal budget is higher than the national average. In the long run, given the financial situation of the federal government, this will likely lead to further downsizing of Northern enterprises.

Table 12: Selected Economic and Social Indicators of the Northern Regions in the 1990s

		egional Pro 1995 (ths.	*	Profitability	Loss-Making Industrial	Capital investment,	Structure of	investment 196 (percent	. •	Ratio of job	Registered	Ratio of average money
	I	Regionally	Percent of	in industry,	Enterprises 1997 (share	1996	Federal	Regional	Enterprise	eekers/vacancies.	nemployment rate	income to subsistence
				1995	of all							minimum, June
	Nominal	deflated	national	(percent)	enterprises)	1992=100	budget	budget	funds			1997
RUSSIAN FEDERATION	9,562.2	9,562.2	100.0	7.4	43	49.4	9.2	9.6	66.3	6.0	2.7	2.27
The North			••		53	**	6.0	10.3	74.4			
Karelian Republic	10,245.5	6,485.0	67.8	9.3	63	24.2	8.7	8.7	72.2	61.1	5.9	2.13
Komi Republic	16,250.7	12,043.7	126.0	3.5	60	31.7	11.5	14.6	50.6	22.0	6.2	2.40
Arkhangel'sk Oblast	9,336.3	7,403.3	77.4	7.1	61	18.2	17.6	6.2	50.9	87.8	8.0	1.87
Nenets Autonomous Okrug '				.,	70		10.5	14.9	32.0	40.8	5.5	**
Murmansk Oblast	13,577.0	8,608.1	90.0	6.0	42	19.1	15.8	7.8	73.0	30.3	5.3	2.27
Tyumen' Oblast	34,421.4	23,081.7	241.4	••	44	31.8	2.3	10.8	81.2	4.6	2.4	4.12
Khanty-Mansiy Aut. Okrug				5.9	46		2.4	13.4	77.3	7.9	3.3	**
Yamal-Nenets Aut. Okrug *				1.9	51		2.2	7.8	85.7	9.2	3.1	••
Tuva Republic	3,523.0	2,589.2	27.1		75	7.2	62.5	15.9	19.7	351.7	2.2	0.91
Krasnoyarsk Kray	14,173.8	15,381.2	160.9	••	46	42.6	5.8	3.5	82.4	23.2	3.8	2.61
Taymyr Autonomous Okrug				0.1	0	**	23.9	8.9	67.2	39.6	4.0	••
Evenki Autonomous Okrug				9.3	33	,,	44.8	43.2	6.4	636.0	5.2	
Sakha Republic (Yakutia)	19,756.0	8,912.4	93.2	6.2	68	29.5	3.0	11.2	40.2	8.6	1.0	1.54
Chukotka Autonomous Okru	14,138.7	6,550.6	68.5	0.6	77	22.1	57.9	9.6	24.0	71.7	3.4	••
Kamchatka Oblast	12,973.7	6,534.7	68.3	0.9	60	34.2	30.7	10.3	53.8	5.6	3.9	1.66
Koryak Autonomous Okrug				8.2	50		95.4	3.9	0.7	65.8	6.8	••
Magadan Oblast	12,555.7	5,817.2	60.8	2.5	58	16.5	14.7	0.8	32.7	9.7	3.2	1.57
Sakhalin Oblast	10,490.5	5,652.6	59.1	1.7	55	13.4	19.1	4.5	81.8	15.1	3.6	1.51

Sources and notes:

Gross regional product: Goskomstat Rossii, Regionay Rossii, 1997, pp. 370-372. The regionally deflated gross regional product figures were computed by the nominal GRP figures by the regional minimum subsistent Profitability: Based upon Drebentsov. Defined as profits as a share of fixed and working capital.

Loss-making industrial enterprises: Goskomstat Rossii, Sever v ekonomike Rossii; Sbornik 1997, Syktyvkar, p. 27. Totals for the North are for the enlarged Far North and equivalent regions.

Investment data: Goskomstat Rossii, Sever v ekonomike Rossii: Sbornik 1997, Syktyvkar, p. 27. Cummulative index over period was computed by chaining together annual indexes.

Investment by source data: Goskomstat Rossii, Sever v ekonomike Rossii: Sbornik 1997, Syktyvkar, p. 27. Data do not add to 100. Totals for the North are for the enlarged Far North and equivalent regions.

Revenue and expenditure data: Ministry of Finance.

Job seekers/vacancies: Goskomstat Rossii, Regiony Rossii, 1997.

Registered unemployment rate: Goskomstat Rossii, Rasprostranenyie dannyie po rezultam vyborochnogo obsledovaniya naseleniya po problemam zanyatosti, provedennogo v oktyabre 1995 godu, 1996.

Average incomes, wages, and subsistence minimum: Goskomstat Rossii, Sever v ekonomike Rossii: Sbornik 1997, pp. 76-77.

Average pension: Goskomstat Rossii, Sotsial'noye polozheniye I uroven's zhizni naseleniya Rossii: Statisticheskiy sbornik, 1997.

Housing privatization: Goskomstat Rossii, Regiony Rossii, 1997.

Wages arrears: Goskomstat Rossii, Sotsial'no-ekonomicheskoye polozheniye Rossii yanvar' 1998 goda, pp. 289-290.

- 83. The stress in the labor market caused by the incorporation of the true cost of doing business in high-latitude regions is becoming clearly evident. At the beginning of 1998, the registered unemployment rate was higher than the national average in 14 of 16 Northern regions and the ratio of job seekers to job vacancies was higher in 15 of 16 regions in the North and in many cases, much higher. This indicates not only that job prospects are minimal when out of work in the North but that many unemployed either will not or can not leave the North to seek work elsewhere. It seems as if people who have a job in the North are doing reasonably well as the ratio of the average wage to the regional subsistence minimums is higher than the national average in every Northern region. However, proportional wage arrears seem to be much higher as well. Roughly a one-fifth of the total wage arrears in the economy were to workers in the North, which contained only 6 percent of the population. If non-wage incomes are incorporated, the situation of Northerners is clearly worse. Only 3 of 11 Northern regions have ratios of money income to subsistence minimum above the national average, evidenced of the lack of alternative income sources that are so important and found in most other regions of Russia. For pensioners, the situation is quite abysmal as in only one Northern region does the ratio of average pension to the subsistence minimum for pensioners exceed the national average. As was seen above, there has been a build-up of pensioners who would like to leave the North but who lack sufficient savings to be able to move and establish themselves in a destination region.
- Amenity indicators for Northern regions show a similar picture. Rates of housing privatization are lower than the national average in all Northern regions. Given the overall housing shortages in Russia, regions with high rates of housing privatization show a positive correlation as destination regions for in-migration. The Northern shipment which has been an important source for delivering food, fuel, and other necessary consumer goods has been drastically cut during the transition period, falling from roughly 2 percent of GDP in 1992 to 0.13 percent in 1997. There are numerous reports with problems in delivering even these reduced amounts.
- 85. In sum, as the high costs of doing business in the difficult climatic conditions of the North are increasing incorporated into profit equations of enterprises, an inevitable downsizing of the region's economy is occurring. The new market-based Russian economy can no longer afford the scale of Northern development that the centrally-planned Soviet government could.

This has lead to a shrinking of economic activity in the region and out-migration. Given the investment trends in the region, coupled with the financial situation caused by the devaluation of the ruble in August 1998, it seems as if further out-migration pressures from the North may build.

### III. PROJECTIONS OF FUTURE MIGRATION FROM THE NORTH

- 86. How much more migration can be expected from the North and what factors will influence this migration? When will the population of the North stabilize at its 'correct' size? As was mentioned above, migration from the North continues but at a considerably slower pace than its peak in 1994. There are number of factors that will influence the future population size of the Northern regions such as level and types of economic activity, which are influenced by levels of investment, pace of enterprise restructuring and withdrawal of government subsidies, support given to those who might want to leave, economic prospects in recipient regions, and also the overall economic situation in Russia. There will of course be differences among the Northern regions as to how these factors will interplay to influence patterns and levels of population growth and migration in the future. This section presents a summary of the Russian government's official projections of out-migration from the North, migration potential of individuals as reflected in a survey of potential migrants from the North, and an examination of the economic prospects for the Russian North and the impact that this has on migration.
- 87. Russian Government Projections of the Northern Population: One source of data on the possible future migration potential from the North are the population projections done by the State Committee on Statistics of the Russian Federation (Goskomstat Rossii). The most recent set contains projections to the year 2010 with a base year of 1995. The projections for the Northern regions are shown in table 13. According to these projections, the out-migration from the North is expected to continue and the natural increase is expected to turn negative, resulting in a population decrease of 600 thousand. Overall, another 583 thousand more persons are expected to leave the North and there is expected to be a 6.5 population decline between 1995 and 2010. Four of the 16 Northern regions are projected to actually grow in population size over the projection period. These are the Khanty-Mansiy and Yamal-Nenets Okrugs of West Siberia, which actually have been growing moderately over the past few years due to high rates of natural increase and moderate in-migration. The Tuva Republic in southern Siberia is projected to grow in population due to a high rate of natural increase. The fact that the Chukotka okrug is expected to grow is probably more of a statistical artifact of the projection methodology.

Table 13: The Projected Population of the Russian North, 1995-2010 (end-of-year; thousands)

	Total pop	ulation	Population change, 1995-2010				
		_		Natural			
Region	1995	2010	Total	increase	Migration	Percent	
RUSSIAN FEDERATION	147,976	143,704	-4,272	-7,550	3,277	-2.9	
The North	9,165	8,566	-599	-16	-583	-6.5	
Karelian Republic	785	767	-18	-50	32	-2.3	
Komi Republic	1,185	1,076	-109	-26	-83	-9.2	
Arkhangel'sk Oblast	1,521	1,401	-120	-82	-38	-7.9	
Nenets Autonomous Okrug *	48	43	-5	1	-6	-10.6	
Murmansk Oblast	1,048	885	-163	-53	-110	-15.6	
Khanty-Mansiy Aut. Okrug *	1,331	1,378	47	70	-23	3.5	
Yamal-Nenets Aut. Okrug *	488	598	110	49	61	22.5	
Tuva Republic	310	337	27	42	-15	8.8	
Taymyr Autonomous Okrug *	47	40	-7	0	-7	-14.0	
Evenki Autonomous Okrug *	20	15	-5	1	-6	-26.1	
Sakha Republic (Yakutia)	1,023	953	-70	73	-143	-6.8	
Chukotka Autonomous Okrug	91	115	25	4	20	27.1	
Kamchatka Oblast	411	322	-89	-11	-78	-21.7	
Koryak Autonomous Okrug *	33	23	-10	-1	-9	-29.9	
Magadan Oblast	258	192	-66	0	-67	-25.6	
Sakhalin Oblast	648	487	-161	-35	-126	-24.8	
<b>Equivalent Regions</b>	17,719	17,239	-480	-113	-367	-2.7	
Perm' Oblast	3,009	2,883	-126	-179	52	-4.2	
Komi-Permyak Aut. Okrug *	157	112	-45	-9	-37	-28.7	
Altay Republic	202	265	63	12	51	31.4	
Tomsk Oblast	1,078	1,060	-18	-26	9	-1.6	
Tyumen' Oblast	3,170	3,425	255	118	137	8.0	
Buryat Republic	1,053	1,064	. 12	33	-22	1.1	
Krasnoyarsk Kray	3,106	2,916	-190	-113	-77	-6.1	
Irkutsk Oblast	2,795	2,734	-61	-30	-31	-2.2	
Chita Oblast	1,295	1,232	-63	28	-91	-4.9	
Primorskiy Kray	2,255	2,051	-204	-77	-127	-9.1	
Khabarovsk Kray	1,571	1,389	-182	-47	-135	-11.6	
Amur Oblast	1,038	991	-47	-2	-45	-4.5	

Sources and notes: Goskomstat Rossii, Ob osnovnykh tendentsiyakh razvitiya demograficheskoy situatsii v Rossii do 2010 goda (doklad), Moscow: 1997.

88. These four regions which are projected to increase in size ameliorate much of the overall projected population decline in the North. Nine of the 16 Northern regions are projected to loose another 10 percent or more of their populations and 5 are projected to show declines of more than 20 percent, or more than one in five persons. Since the number of births is expected to just

about equal the number of deaths in the North over the next decade and a half, most of the population change will be driven by migration trends.

- 89. The limitation of the population projection methodology is that they are typically only able to incorporate demographic variables. The influence of economic conditions and other factors are typically endogenous and are incorporated through the assumptions regarding future trends in fertility, mortality, and migration. Because of the volatility of migration, the fact that it is subject to so many influences, and that it is less constrained by the current age-sex composition of the population, it is the most difficult of the components of population change to predict. This is the case in general and is certainly true of projecting the future migration patterns in the North. To gain a more plausible assessment of possible future migration trends, it is necessary to assess more closely the underlying economic condition and prospects of the region under market conditions. It would be best to do this at lower geographic levels of cities and settlements. Another factor that is difficult to include explicitly into population projections are any barriers to migration that may exist, and there certainly many among those who wish to migrate from the North.
- 90. Northern Migration Potential and Barriers to Migration: Going beyond demographic projections, one needs to examine both micro-level data on individuals living in the North and their migration intentions and macro-level data on the Northern economy and the impact that changes in it will have on migration. In order to ascertain the attitudes of people living in the North, a survey was conducted of selected groups of potential migrants pensioners, invalids, unemployed, and students. Between 400 and 500 members of each of these groups were interviewed regarding their attitudes towards life in the North, their migration intentions, and their migrants needs. The survey was conduced in four Northern regions Vorkuta, Norilsk, Magadan, and the Nenets Okrug. A summary of the results for each of the four groups is presented below.
- 91. As table 14 shows, nearly half of the pensioners have lived in their place of current residence for 30 years or longer, and nearly 70 percent have live there for 20 years or more. Very few were born in the North, indicating a typical pattern in the North of migrating to the region from elsewhere and staying their most of their careers. Though most had lived in the North for long periods of time, nearly two-thirds would like to leave the North. Most want to move to be near family or friends or because of climatic conditions. Only 3.5 percent indicate that they or

their relatives are financially able to pay for even a portion of transport costs or the costs of setting themselves up in a new location. This means that 96 percent say that neither they nor their relatives are able to pay even a portion of the migration expenses. Nearly a third of respondents indicate that they are a waiting list to migrate, with twenty percent saying that they've been on such a list between 1 and 5 years. Nearly half of pensioners surveyed (respondents were allowed to select up to three answers) said that their major migration need was assistance with housing construction or rent. A quarter of pensioners in the survey estimated the cost of the move would be between 50,000 and 100,000 rubles (roughly between \$8,000 and \$16,000 at the exchange rate prevailing at the time of the survey). Two-thirds indicated that the cost would exceed 100,000 rubles. Seventy-three percent indicated that they had no savings with which to finance such a move and another 21 percent said that the savings they did have was insufficient.

- 92. Among the invalids in the survey, higher proportions were born in the North than the pensioners surveyed, 30 percent versus 13 percent. Of those not born in the North, most had lived there for a long time, with half having lived there between 10 and 30 years. Sixty-eight percent would like to leave the North, a rather high share given that 30 percent had been born in the North. Nearly sixty percent of invalids indicated that better climatic conditions were the primary reason they wanted to leave the North. A third of respondents indicated that that they wanted to migrate from the North in order to earn additional income; better educational opportunities for their children; or to live closer to relatives or friends (respondent could give up to three answers). For invalids, roughly the same share as pensioners (96.5 percent) indicated that neither they nor their relatives could afford any portion of the cost of relocation or establishing themselves in a new location. Two-thirds of invalids indicated the primary need they had in the migration process was assistance with the acquisition of housing. A quarter estimate the cost of the move at between 50,000 and 100,000 rubles (\$8,000 to \$16,000) and seventy percent estimate the cost to be over 100,000 rubles. Ninety percent indicate that they don't have sufficient savings to be able to finance the migration themselves.
- 93. The unemployed in the survey have a higher share native born than the other groups, with a third born in the Northern region they are currently residing in and less than 10 percent having lived in the North for more than 30 years. Because of the age structure, most are many years from retirement, with half being more than 10 years from pension age. Nearly half of the unemployed surveyed had been out of work over a year. Nearly half had quit their positions and a third had lost their positions because of a liquidation or reorganization of the enterprise. A much

smaller share (56 percent) of the unemployed versus pensioners or invalids desired to leave the North. About 90 percent of unemployed state that they or their relatives do not have the financial resources to be able to pay for transport from the North and establishing themselves in a new location in the south.

94. The fourth group of potential migrants questioned were students in their final year of compulsory school or in professional-technical institutions (PTUs). Two-thirds of students interviewed were born in the North. Eighty-seven percent were in their final year of compulsory school and 13 percent were students in PTUs. Most (87 percent) intended on continuing their schooling beyond completion at their current level. Of those who would like to continue their education, 37 percent indicated that they would like to do so outside the region they are currently living in. Seventeen percent stated that they would like to continue their schooling in the oblast center. Thus, for over half of students, continuing their education according to their desires would require a migration.

Table 14: Results of the Survey of Potential Migrants in Selected Northern Regions

	<u>.                                  </u>		
	Pensioners	Invalids U	Jnemployed
Total number of respondents	471	438	403
Norilsk Industrial Region	121	94	106
Magadan oblast	120	122	63
Komi Republic	117	122	108
Nenets Autonomous Okrug	113	100	126
Length of time lived in region (percent)			
Since birth	12.6	29.9	33.5
less than 10 years	2.6	4.3	12.7
10 to 20 years	14.7	23.3	25.8
20 to 30 years	22.3	27.2	18.4
more than 30 years	47.1	15.3	9.7
Would like to leave the North (percent)			
Yes	62.1	68.1	55.5
No	37.9	31.9	44.5
Are your relatives prepared to pay for your resettlement	nt from the		
North? (percent)			
Yes, transportation and new residence	1.1	0.7	2.0
Yes, partial transportation and new residence	1.5	0.5	5.6
Yes, partial transportation only	1.1	2.2	3.1
No	96.3	96.5	89.4
Do you have sufficient savings to be able to migrate fro	m the		
North? (percent)			
We have no savings	72.7	89.3	80.3
We don't have sufficient savings	21.4	8.2	15.0
We only have savings that will pay for transportation	2.6	0.7	1.9
Yes, provided guaranteed income and housing subsidy	3.3	1.9	2.7
		-	

- 95. As the results of this survey show, the migration potential is rather high even though many were born in the North or had lived in the region long enough for it to be considered their home. As was also confirmed, the barriers to migration remain high in terms of people being able to afford the cost of migration from the North and establishing themselves in a new location. Further research at the individual level, including among the employed population is probably needed.
- With price liberalization, privatization, and more open foreign trade, some Northern industries benefited while most suffered. To more precisely determine the effect that these structural changes in the Northern economy have on migration would require an industry-by-industry examination of changes in the demand for products produced in the North and changes in the structure of costs of these industries. Ideally, this should be done at the settlement level. Though most of the Northern migration that has occurred has been out-migration *from* the North, it cannot be precluded that some of these structural changes will induce labor shortages in select Northern settlements creating a demand for migration *to* the North. This has already begun to appear in several North regions. In the Khanty-Mansiy and Yamal-Nenets regions of West Siberia, there has been net in-migration to those regions. These are the oil and gas regions of Russia that have greatly benefited from Russia's economic transition. Besides Moscow, they have been among the leading regions for foreign direct investment in Russia.
- 97. The Russian State Committee for Northern Development (Goskomsever) has begun an evaluation of small rural settlements across the North. It is examining their economic viability and transport links to each of them. The purpose of this exercise is to make the Northern shipment more efficient and also to reduce the cost of supplying goods to small, distant settlements. They have recommended that 382 of the 1,400 small settlements in the North be shut down. They do realize the difficulty of doing so. Many of the inhabitants of these settlements are less skilled and have lived in the North for a long period of time. Officials from Goskomsever believe that many of the inhabitants of these settlements will not want to leave the North but will want to move to the nearest oblast center.

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## **Summary Findings**

A majority of Russia's crucial raw materials are located in its Northern periphery. During the Soviet period, there was a unique set of development practices that existed to exploit the resources of the Northern regions. These included financial and other incentives for people to move to and work in the North and the construction of large urban agglomerations in the region. The result was that Russia had a much more densely populated North than other countries with comparable high-latitude regions.

One unintended consequence of Russia's transition to a market economy has been a massive out-migration from the Northern periphery. From the 16 regions defined as North in this study, over 10 percent of the population has migrated out since 1989. At the extreme are several Northern regions where over half the population has left during this period. Those leaving tended to be younger and more highly educated in general those more able to do so. Many older and less able persons are left in the North without the resources to be able to leave. The major causes of this out-migration have been price liberalization; fiscal decentralization; and a shift in Russia's approach to the development of its Arctic and sub-Arctic regions.

The study examines patterns of migration in the Russian North during the transition period beginning with a brief history of the settlement of the Russian North. Data are presented showing the composition of the Northern population prior to transition, followed by a description of the levels, direction, age-sex composition, educational, occupational characteristics, and mechanisms of Northern migration trends. The final section attempts to determine the possible future levels of migration from the North that can be expected.

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