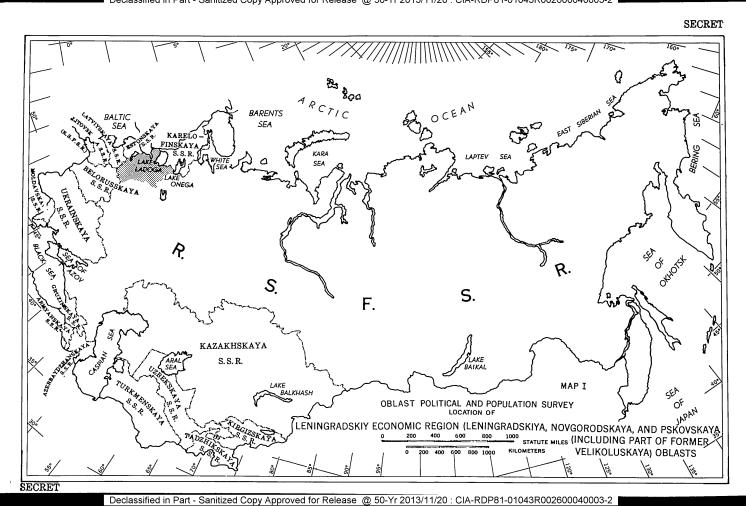
Declassified in Part - Sanitized Copy Approved for Release @ 50-Yr 2013/11/20 : CIA-RDP81-01043R002600040003-2 50X1-HUM SECRET POLITICAL AND POPULATION 50X1-HUM SURVEY LENINGRAD ECONOMIC-ADMINISTRATIVE REGION COMPRISING No. 113 LENINGRADSKAYA OBLAST No. 115 NOVGORODSKAYA OBLAST No. 116 PSKOVSKAYA OBLAST (INCLUDING PART OF 104, FORMER VELIKOLUKSKAYA OBLAST) Prepared by Air Research Division Library of Congress Washington 25, D. C SECRET 9 APRIL 1958 50X1-HUM



Political and Population Survey

Leningrad Economic-Administrative Region

Comprising:

No. 113 LENINGRADSKAYA OBLAST

No. 115 NOVGORODSKAYA OBLAST

No. 116
PSKOVSKAYA OBLAST
(including part of No. 104, the former VELIKOLUKSKAYA OBLAST)

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9 April 1958

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NOTICE

1. The estimates appearing in this study result from an accelerated survey of available data. All figures are the best possible estimates to be derived from accessible information.

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2. Population estimates as of 1 January 1959; administrative-territorial boundaries as of 1 January 1958.

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POLITICAL AND POPULATION SURVEY

LENINGRAD ECONOMIC-ADMINISTRATIVE REGION

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9 April 1958

LENINGRAD ECONOMIC-ADMINISTRATIVE REGION

Statistics

	A	В	C	D	E
Land Area in Sq. Miles	(0.727.0	480.0	28,410.9	19,660.0	20,580.0
Total Est.	69,131.0	480.0	20,410.7	·	
1959 Pop.	6,274,000	3,296,000	1,225,000	731,000	1,022,000
Urban Pop.	4,442,000	3,296,000	632,000	262,000	252,000
Rural Pop.	1,832,000		593,000	469,000	770,000
Cities	20	6	9	3	2
Towns	32	2	14	4	13
Urban Settle-	_				
ments	64	12	34	16	2
Rural Rayons	102		26	35	41
Selsovets	1,179	5	372	398	404

A. Leningrad Economic-Administrative Region

I. Government Controls

A. General

The Leningrad Economic-Administrative Region, comprising a territory of 69,131 square miles, contains 3 oblasts: Leningradskaya, Novgorodskaya, and Pskovskaya Oblasts. The Economic Region is in the old Northwest Economic Region (although that included the Karelskaya ASSR), lying S of Lakes Ladoga and Onega, and bordering on the Gulf of Finland (refer to Map I). The region, sometimes called the Lake Region,

B. Leningrad Administrative Area

C. Leningradskaya Oblast

D. Novgorodskaya Oblast

E. Pskovskaya Oblast

These figures do not include the largest lakes in the region. That portion of Lake Ladoga contained in Leningradskaya Oblast is 4,042 square miles; Lake Ilmen, in Novgorodskaya Oblast, has a measured area of 345 square miles; and, that portion of Lake Peipus contained in Pskovskaya Oblast has a measured area of 730 square miles.

has a moderate but humid climate, and a well-developed lake and river network which, except for the southermost part, drains into the Gulf of Finland. The city of Leningrad is located at the easternmost extension of the Baltic Sea, the Gulf of Finland, and has access to the Atlantic Ocean.

The boundaries of the present day Leningrad Economic-Administrative Region (Leningradskiy Sovnarkhoz) are equivalent to the original Leningradskaya Oblast when it was formed in 1927 (less Murmanskaya Oblast which became independent in 1938). In 1944 Novgorodskaya and Pskovskaya Oblasts were formed, reducing considerably the territory administered by Leningrad. In the middle 1940's the border with the then Karelo-Finskaya SSR was revised to give Leningradskaya Oblast the entire land area between Lake Ladoga and the Gulf of Finland.

Novgorodskaya Oblast has had no significant territorial changes since its formation in 1944. In October 1957, Pskovskaya Oblast was doubled in size when Velikolukskaya Oblast was abolished and approximately two-thirds of its territory was transferred to Pskovskaya Oblast. That part of Velikolukskaya Oblast transferred to Pskovskaya Oblast has been treated in this report as an integral part of Pskovskaya Oblast. Late in 1957, a relatively small exchange of territory between Estonskaya SSR and Pskovskaya Oblast occurred. The exchange, as far as numbers of people are concerned, was negligible.

Leningrad, the second largest city in the USSR, is the capital of Leningradskaya Oblast, the second most heavily populated oblast in the USSR. Within the Leningrad Economic-Administrative Region, Leningradskaya Oblast has the largest population and the highest degree of urbanization (86.9 per cent with the city of Leningrad and 51.6 per cent without the city); Pskovskaya Oblast is second in terms of total population; Novgorodskaya Oblast is more highly urbanized.

The Economic Region is the second most important region of

the USSR in terms of industrial production, being surpassed only by Moskva. The region produces 6 per cent of the industrial product of the USSR and about 10 per cent of the industrial product of the RSFSR.

The epicenter of the Economic Region lies in the city of Leningrad, the capital of Russia from 1713 to 1918. Under Peter the Great, who founded it in 1703, and his successors, Leningrad (then called St. Petersburg) developed as one of Europe's most brilliant capitals and cultural centers. In the late 19th century it also developed as a leading industrial and maritime center. Although the capital was transferred, Leningrad has remained Moskva's economic and cultural rival. Within the Economic Region Leningrad contains 53 per cent of the population and produces about 95 per cent of the industrial product of the region.

In recognition of Leningrad's significance to the national economy, the city was elevated to a city of Republic subordination in 1931, and the government of the city was made directly subordinate to the government of the RSFSR in Moskva.

B. Control Groups

1. Communist Party and Komsomol

There are an estimated 382,000 Communist Party members in the Leningrad Economic-Administrative Region, of whom approximately 22,500, or 5.9 per cent, are full-time Party members, defined as the Party control force. The incidence of 97 Party members per 1,000 adult population, age 18 and over, is higher than the estimated average for the RSFSR (65 per 1,000) and well above the average for the USSR (56 per 1,000) (see Table I, page 4). In terms of total population, the incidence of 63 Party members per 1,000 total population is higher than the estimated average for the RSFSR (42 per 1,000) and well above the average for the USSR (36 per 1,000).

TERRITORIAL DIVISIONS: 19561

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^{1/} The figures for Pskovskaya Oblast do not include those Party members in that part of Velikolukskaya Oblast ceded to Pskovskaya Oblast. Velikolukskaya Oblast, before being abolished, had an incidence of 30 Party members per 1,000 total population.

Within the Economic Region, the number of Party members in the Leningrad City Administrative Area comprises about 9.4 per cent of the total population, or 12.5 per cent of the adult population. This is the highest participation in the Economic Region and one of the highest incidences of urban Party membership in the USSR. The high Party representation reflects the administrative and political significance of the city and the concentration of nationally significant economic, educational, research, and military facilities. In the remainder of the oblast approximately 3.8 per cent of the total population are Party members. This is a higher incidence than in the other oblasts of the region but is much less than the incidence of Party members in the Economic Region or in the city of Leningrad (see Table I).

Region are responsible, through their departments for economic, civic, and cultural activities, for implementation and fulfillment of directives from the Bureau for RSFSR Affairs of the Central Committee of the Communist Party in Moskva. The Oblast Committee of the Communist Party, in each oblast of the Economic Region, direct the activities of subordinate committees in each of the cities and rural rayons of their respective oblast. The City Party Committee directs the work of Party Committees in 16 rayons of the city and Party activities in the 6 cities subordinate to the Leningrad City government.

The First Secretary of the Leningrad Oblast Party Committee is usually a member of the USSR Party Central Committee; all previous First Secretaries have had this distinction. The position is considered to be one of highest authority. In December 1957, the First Secretary of the Oblast Party Committee, Frol R. Kozlov, advanced to become Premier of the RSFSR and I. Spiridonov became First Secretary of the Oblast Party Committee and N. N. Rodionov First Secretary of the City Party Committee.

All Party agencies within the cities and oblasts of the region are responsible for (and direct) the activities of members in fulfilling all directives of superior Party organs. They also supervise all civil Party Primary Organizations (comprised exclusively of Party members and candidates) formed in enterprises, machine-tractor stations, collective and state farms, government agencies, research and educational institutions, trade unions, and other establishments, through Party Secretaries "elected" by these organizations with the approval of the local Party Committee at the same level. The function of each Primary Organization is to maintain a continuous check on the operations and personnel activities within its jurisdiction. Primary Organizations in military and militarized MVD units, and in fleet, maritime, air units, and MGB units are directly subordinate to political directorates of USSR ministries or committees in Moskva.

The City and Oblast Komsomol Committees in Leningrad City and the three oblasts of the Economic Region, under the direct supervision of the City and Oblasts Communist Party Committees, direct the activities of Komsomol members within the Region. In Leningradskaya Oblast (including Leningrad City) there are an estimated 519,000 Komsomol members, representing about 12 per cent of the total population. The Komsomol is active in mobilizing support for Party and government policies and in promoting the paramilitary and civil defense training programs.

During the period of the consolidation of Stalin's power, the Leningrad Party apparatus led by Zinoviev resisted the efforts of Stalin to gain absolute control over the Party. The resistance of the Leningrad Party organization led by Zinoviev came to an abrupt end in February 1926, when at a special Party conference, a Stalinist apparatus was installed in Leningrad. Kirov, a Stalin man, became the

new leader of the Leningrad Party organization and presided over the purge that was instituted in Leningrad. In December 1934, Kirov was assassinated by an alleged former member (Nikolayev) of the Zinoviev opposition group and a new purge began in the Leningrad Party organization. It should be noted here that there are rumors that Stalin himself had Kirov assassinated because of his (Kirov's) increasing power. In 1935, thousands were arrested on the assumption that they harbored oppositionist tendencies. Zinoviev was tried and shot. From Leningrad the purge spread throughout the USSR. In 1934, Andrey Zhdanov was transferred to Leningrad as the Party secretary.

In the post-World War II period, the Leningrad Party organization again became involved in the Kremlin power struggles. Zhdanov, a power in the national and Leningrad Party organizations appears to have been struggling with Malenkov for Stalin's favor. Following Zhdanov's death in August 1948, all 5 Leningradskaya Oblast Party secretaries, all 5 Leningrad City Party secretaries, and the chairmen of the oblast and city executive committees were removed from office. At the same time, N. A. Voznesenskiy, a Politburo member and the Chief State Planner, A. A. Kuznetsov, Secretary of the All-Union Central Committee, and M. I. Rodionov, head of the RSFSR government, disappeared.

Pretexts for the dismissal of the Leningrad Party members, and those Party members in Moskva, were charges of moral degeneration and "nationalist tendencies," that is, Great Russian nationalism.

They had allegedly held, without consent from the All-Union authorities, an industrial fair in Leningrad to sell products of the Russian Republic. There has been speculation that the plan was to establish an RSFSR Party organization in Leningrad, which was to become the capital of the RSFSR in place of Moskva.

Following the arrest of Beria in the summer of 1953, the

"Leningrad Case" again came to light. Beria's former MGB chief, V. S. Abakumov, and 5 other accused persons, were tried in Leningrad on charges of having made false accusations against individual Party and government workers in Leningrad City and Oblast, and of having obtained false confessions of serious crimes through illegal methods of investigation.

V. M. Andrianov, the successor to the purged First Secretary of the City and Oblast Party organizations in 1949, remained in power until after Beria's arrest in 1953. In November 1953, Frol R. Kozlov, at a meeting attended by Khrushchev, was appointed the new First Secretary of the Leningrad Party organization. In February 1957, he was named an alternate member of the Party's Presidium, and 4 months later Mr. Kozlov was advanced to full Presidium membership. In December 1957, Mr. Kozlov was appointed RSFSR premier and I. Spiridonov, First Secretary of the Leningrad City Party organization, was appointed First Secretary of the Oblast Party Committee. On March 31, 1958, Mr. Kozlov was made First Deputy Premier of the USSR. The changes in the local Party leadership in Leningrad with each change of Party leadership in Moskva is an indication of the importance the Leningrad Party organization plays in national affairs.

2. Military

The city of Leningrad is one of the most important military control, training, and research centers in the USSR. Headquarters, Leningrad Military District (Target O153-0598), located in Leningrad and subordinate to the USSR Ministry of Defense in Moskva, directs army and tactical air operations and also exercises supervisory control over land-based naval personnel in the district, which includes Leningradskaya, Novgorodskaya, and Pskovskaya Oblasts. Tactical air units are directly subordinate to the 13th Tactical Air Army Headquarters in Leningrad (Leningrad Air Force Headquarters, Target O153-0597), under the Military District Headquarters. Long Range Air

Army (IRAA) units based at the major airfields in the Economic-Administrative Region are under the jurisdiction of the 1st IRAA in Moskva. Leningrad is also Headquarters of the 12th Air Defense Region, and all Air Defense Command (PVO) personnel in the region are subordinate to this headquarters (refer to Map V).

As of 1 December 1957, the following units were subordinate to the Military District: 13th Tactical Air Army; 8th Army
(Gatchina Headquarters Army, Target 0153-0842) with the 45th Guards
Rifle Division at Vyborg, 63rd Guards Rifle (Mecz?) Division at
Pargolovo, and 64th Guards Rifle Division at Priozersk. The intermediate subordination of the 2nd Guards Tank Division at Pechory
and the 76th (Airborne?) Guards Rifle Division at Pskov (both in
Pskovskaya Oblast) is unknown. An antiaircraft regiment is attached
to each rifle division, with the exception of the 76th (Airborne?).
Two additional unidentified antiaircraft (PVO) divisions are stationed
near the city of Leningrad.

The Estonskaya SSR, formerly incorporated within the area of the Leningrad Military District, is now part of the Baltic Military District, headquarters in Riga.

Leningrad is also the single most important Soviet naval shipbuilding, ship repair, and training center in the USSR. Naval operations ashore, afloat, and airborne in the Leningrad Economic-Administrative Region are probably directed by Headquarters of the Baltic Fleet in Baltiysk (Kaliningradskaya Oblast), operating through the Kronshtadt Naval Defensive District. The Kronshtadt Naval Defensive District (KMOR) extends from the Finnish border to Kunda (Estonskaya SSR). The District, analogous to U.S. Naval Sea Frontiers, is responsible to the Fleet Commander (in Baltiysk) for the administration of the district. The following estimated percentages of the USSR's combat ships are based at Leningrad/Kronshtadt: 12 per cent of

the major combat ships; 27.1 per cent of the long- and medium-range submarines; and 19.1 per cent of the short-range submarines.

Headquarters, Leningrad Military District controls an estimated 266,000 military personnel (see Table II) representing about 6 per cent of the Economic Region's adult population, age 18 and over.

TABLE II

ESTIMATED COMPOSITION OF ARMED FORCES OF LENINGRAD MILITARY DISTRICT: 1 January 1956

Division	Army	Navy	Air Force	MVD	Total
Leningradskaya Oblast Novgorodskaya Oblast Pskovskaya Oblast	80,000 10,000 25,000	85,000	38,000 6,000 <u>6,000</u>	12,000 2,000 2,000	215,000 18,000 33,000
Economic Region Total	115,000	85,000	50,000	16,000	266,000

The military control force of the Leningrad Economic-Administrative Region is estimated at 111,000 (1956), 40,000 officers and 71,000 NCO's (see Table III). Almost all of the officers and probably more than 50 per cent of the NCO's are members of the Communist Party.

TABLE III
ESTIMATED MILITARY CONTROL FORCE: 1956

Branch of Service	Primary (Officers)	Secondary (NCO's)	Total_
Army Navy (excl. SNAF) Air Force (incl. SNAF) (MVD)	15,000 10,500 12,500 (2,000)	29,000 20,500 17,500 (4,000)	44,000 31,000 30,000 (6,000)
Total	40,000	71,000	111,000

The Baltic Sea area bordering on Leningradskaya Oblast, is the location of facilities capable of the construction and repair of vessels of practically any type. Leningrad, the major shipbuilding and repair center of the area, has the following major shipbuilding and repair yards:

Leningrad Shipyard, "Baltiysk Ordzhonikidze" 189
(Target 0153-0019)
Leningrad Shipyard, "Marti" 194
(Target 0153-0068)
Leningrad Shipyard, "Zhdanov" 190
(Target 0153-0064)
Leningrad Shipyard, "Sudomekh" 196
(Target 0153-0167)
Leningrad Shipyard, "Krasnyy Sudostroitel" 370
(Target 0153-0375)
Leningrad Shipyard, "Kanonerskiy"
(Target 0153-0210)
Kronshtadt Naval Base and Shipyard
(Target 0153-0167)

The shipyards in Leningrad (including the shipyard at Kronshtadt) represent an estimated 28 per cent of the total USSR capacity for shipbuilding and an estimated 25 per cent of the total USSR capacity for ship repairing, but at the present time they are reported to be supplying 40 per cent of the USSR's newly built craft. These shipbuilding facilities, together with the supporting industrial establishments in and near the city of Leningrad, can readily build war vessels ranging from small coastal submarines and patrol boats to battle-ships and aircraft carriers.

In addition to the major shipbuilding yards, about 20 minor yards, distributed along the Neva River and its delta, are supporting the construction program of patrol craft and mine sweepers. Some of these yards are engaged in experimental research and new designs for hulls, propulsion units, and various component parts. Kronshtadt, a strong defense point on Ostrov Kotlin (island) at the eastern extremity of the Gulf of Finland (18 miles W of the city of Leningrad), is an operating base and the most important repair base of the Baltic Fleet. Major hull and engine repair can be undertaken here.

Leningrad is one of the foremost Soviet naval training centers in the USSR. Located in Leningrad are 25 naval schools which provide academic and/or practical instruction. Of the 4 higher naval schools in Leningrad, 2 are equivalent to the US Naval Academy and 2 to the US Naval War College. There are various other preparatory and advanced naval schools: medicine, engineering, construction, submarine training, intelligence and political science, naval shipbuilding and armaments, and communications.

Leningrad is also one of the foremost centers for research and development in naval weapons and equipment. The Central Scientific Research Institute for Warship Construction of the Naval Forces, Leningrad, is the only naval vessel research and development installation known to be under the direct control of the Soviet Navy. It conducts research on hull designs. The Committee of the USSR Council of Ministers for Shipbuilding also conducts research on naval vessels in Leningrad. The Central Scientific Research Institute 45 im. A. N. Krylov, Leningrad, probably still subordinate to the Committee of the USSR Council of Ministers for Shipbuilding, is the most important organization in Soviet naval research, conducting research in all aspects of naval architecture and marine egnineering. The Central Scientific Research Institute 48, Leningrad, conducts research in the metallurgy of weldable shipbuilding steels and in naval armor plate. The Central Design Bureau for Standardization, Leningrad, develops and designs standard equipment for warships. Additional research and development is carried on by the Leningrad Shipbuilding Institute under the Ministry of Higher Education.

In addition to the naval schools there is an Air Force Engineering Academy which trains Air Force technical personnel and probably also conducts applied researach in aircraft and related fields. The ground forces also have schools in Leningrad which provide training in poison gas, medicine, artillery, electricity, and mechanics.

The cities of Leningrad and Kronshtadt are naval supply centers supporting the operating forces of the Soviet Baltic Fleet and can supply general stores and POL. In addition Kronshtadt can supply munitions and torpedoes. POL storage in Leningrad is estimated to be 1,085,000 metric tons and in Kronshtadt 40,000 metric tons. The military port capacity of Leningrad is estimated to be 60,000 long tons of general cargo per 20 hour day.

The Soviet Air Force and Soviet Naval Air Force operate in the Economic-Administrative Region the following number and types of airfields and seaplane stations (refer to Map V and Section V for location of airfields).

Number	Airfield Category	<u>Class</u>
2	Primary Bomber Bases	ı
ı	Possible Primary Bomber Base	1
1	Alternate Bomber Base	1
1	Alternate Bomber Base	2
ı	Possible Alternate Bomber base	2
6	Primary Defense Bases	2
1 6 1 5 3 1	Primary Defense Base	4 2
5	Alternate Defense Bases	
3	Alternate Defense Bases	4 3
1	Fighter Recovery Base	
2	Fighter Recovery Bases	4
7	Fighter Recovery Bases	4 5 6
À	Seaplane Bases	
ż	Seaplane Bases	7
4 2 3 1	Reserve Bases	4
ī	Reserve Base	5
1	Other	3
1 5	Other	4 5 3 5 5
ĺ	Undesignated	5

Total 48

Of the 48 targeted airfields in the Economic-Administrative Region, 40 are military, 6 are joint civil/military and 2 have an unknown subordination.

Leningrad is reported to have the third largest concentration of IAPVO (the fighter arm of Soviet Air Defense) strength. It is reported that 10 regiments with a TO&E strength of 370 aircraft are deployed within 60 miles of the city. Five of these regiments are

reported to be based across the northern approaches to the city, 5 to the S and W. Both early warning and ground control intercept radar stations are located in the Economic-Administrative Region.

It has been reported that SAM activity (the construction of surface-to-air guided missile sites) has been observed near Leningrad. Located in Leningradskaya Oblast are possible, but unconfirmed, guided missile plants at Svirstroy and Sestroretsk, a guided missile test range at Strelna, a guided missile site at Lisiy Nos, and a rocket launching site at Kronshtadt (refer to Map 3 for location).

Research and development concerned with guided missiles is generally centered around the Committee of the USSR Council of Ministers for Defense Industry (formerly the All-Union Ministry of Defense Industry). It is probable that this Committee has the responsibility for coordinating the missile development effort of all ministries and committees participating in the missile program. In Leningrad 4 institutes have been identified as participating in missile development. Believed contributing to the over-all guided missile effort is the Polytechnic Institute im. M. I. Kalinin, in Leningrad. The Leningrad Institute of Applied Chemistry, GIPKH (Target 0153-0358), probably under the All-Union Ministry of Chemical Industry, is studying the problems involved in the most efficient utilization of natural resources by Soviet chemical plants. Research on propellants was being done here. The Leningrad Television Insitute "A P Lesnoy," NII 380 (Target 0103-0253), probably under the Radio-Electrical Committee of the USSR Council of Ministers (formerly the All-Union Ministry of Radio-Technical Industry), is an electronics institute and is engaged in the development of civilian and military television equipment. It has been indicated that some work was conducted in a secret department at the Lesnoy branch of the above Institute on a television guidance system for an air-to-surface guidance system (based on Toone). Further research is being done at Leningrad Scientific-Technical

Institute 49 (Target 0153-0440), probably under the Committee of the USSR Council of Ministers for Shipbuilding, in the development of ground computers for surface-to-air missiles and development of a gyrostabilized platform for inertial missile guidance systems.

A recent report indicates that Leningrad Arms Plant "Krasnaya Znamya" im. Frunze 7 (Target 0153-0018), subordinate to the Committee of the USSR Council of Ministers for Defense Industry, may be engaged in the development and production of small ballistic or antiaircraft missiles. The plant has had a long history in the development and production of conventional weapons, particularly antiaircraft and field artillery.

Leningrad Tube and Lamp Plant, "Svetlana" 211 (Target 0103-0051) has recently been reported as manufacturing the electrotechnical equipment, such as transmitters and measuring instruments for the 2 launched Soviet satellites. Manufacture of the electrical equipment for future satellites is reportedly under way at this plant.

The only identified MVD troop unit in the Economic-Administrative Region is the 225th Convoy Regiment stationed in Leningrad and probably subordinate to MVD Security Troop Headquarters in Leningrad. No MVD border detachments have been identified or located, but they undoubtedly exist along the Finnish/USSR border and in the port cities of Leningrad, Vyborg, Primorsk, Lomonosov, and Vysotsk. MVD troops are responsible for the protection of high public officials, control of the borders, guarding of strategic facilities, and the supervision of forced labor.

The All-Union Society for Cooperation with Army, Air Force, and Navy (DOSAAF) located in Leningrad, Pskov, and Novgorod are responsible for training of preinductees and veterans in basic and technical military skills in support of the military. Military mobilization and the movement and storage of military supplies are controlled by the Military District Headquarters through Military Commissariats at the Oblast level.

3. Government

The total government control force consists of employees of administrative and nonadministrative agencies of the RSFSR and of the Leningradskaya, Novgorodskaya, and Pskovskaya Oblast governments and the coequal Leningrad City government, working in the oblasts and city governments at all levels of control down to the rural soviets.

The primary government control force comprises employees of governmental administrative and judicial organs and is estimated to total 59,460 in the Economic-Administrative Region, or 1.3 per cent of the adult population, age 18 and over. In the city of Leningrad the primary government control force comprises 27,390, or 1.1 per cent of the adult population. The Executive Committees of the 3 oblasts and the city supervise, under Party direction, the agencies that are responsible for the distribution to the population of food, most housing, consumers goods, local transport, and other municipal services.

The secondary government control force comprises 388,490, or 8.6 per cent of the adult population in the Economic-Administrative Region. In the city of Leningrad the secondary government control force comprises 253,260, or 10.2 per cent of the adult population.

The secondary government control force includes health and educational personnel and those employed in public service and utilities.

Since the reorganization of industry and the establishment of local economic councils, the number of personnel in the government control force on the oblast and local levels is in a process of change. It is expected that the number of government control force personnel will increase and that the estimates provided in Table IV are minimal. The Leningradskiy Council of National Economy (Sovnarkhoz), formed in May 1957, contains enterprises of Leningradskaya, Pskovskaya, Novgorodskaya Oblasts. The Council is the administrative, coordinating, and planning agency for most industrial and construction enterprises in the Economic Region. The Sovnarkhoz, within the framework of decisions taken at higher levels, has responsibility for elaborating and

TABLE IV
ESTIMATED GOVERNMENT CONTROL FORCE: 1958

		Primary	Control Force
Administrative Category	Total Control Force	Number	Per Cent of Total
<u>Leningrad Economic-</u> <u>Administrative Region</u>			
Republic Govt. Oblast and City Govts. Militia	65,000 365,150 <u>17,800</u>	2,280 39,380 <u>17,800</u>	3.5 10.8 100.0
Total	447,950	59,460	13.3
Components: Leningrad- skaya Oblast			
Republic Govt. Oblast Govt. Militia	9,190 51,050 <u>12,300</u>	320 5,550 12,300	3.5 10.9 100.0
Total	72,540	18,170	25.0
Leningrad City			
Republic Govt. Oblast Govt.	42,750 237,900	1,500 25,890	3•5 10•9
Total	280,650	27,390	9.8
Novgorodskaya Oblast			
Republic Govt. Oblast Govt. Militia	5,650 31,450 2,600	200 3,420 2,600	3.5 10.9 100.0
Total	39,700	6,220	15.7
Pskovskaya Oblast			
Republic Govt. Oblast Govt. Militia	7,410 44,750 <u>2,900</u>	260 4,520 2,900	3.5 10.1 <u>100.0</u>
Total	55,060	7,680	13.9

Not included in this total are professional workers of the Communist Party, the officer and NCO components of the armed forces, and economic supervisory and managerial personnel.

implementing current and long-range production plans, for promoting industrial specialization within the Economic Region, for arranging deliveries of raw materials and semifinished products within the region

and between the region and other regions, and for determining the financial and economic activities of subordinate agencies.

Most local and cooperative enterprises, and certain other industries, will remain under the jurisdiction of the local Soviets.

Because vertical subordination of local industry has also been abolished, the role of local Soviets in the direction of industry will increase.

The Leningradskiy Sovnarkhoz is subordinate to and formed by the RSFSR Council of Ministers. The Sovnarkhoz consists of a chairman, a deputy chairman, the industrial branch administration chiefs, and heads of functional departments. It has been recommended that a collegium (council) be formed under the chairman of the Sovnarkhoz, to act as a planning and decision-making body similar to the collegia of ministries. However, all decisions are based on the principle of one-man rule and responsibility (the chairman's).

The Oblast Executive Committees of the 3 oblasts in the

Leningrad Economic-Administrative Region and the City Executive Committee of Leningrad have no jurisdiction over the Sovnarkhoz. The

USSR Council of Ministers realizes control over the Sovnarkhoz

through its control over the RSFSR government. Decisions and directives

of the Sovnarkhoz may be revoked by either the USSR or RSFSR governments.

The Leningrad Economic-Administrative Region has more than 2,000 enterprises with output sufficiently important to be recorded with the Central Statistical Administration. Six-hundred and fifty factories, plants, and construction projects, formerly under all-union, union-republic, or republic subordination, including 8 enterprises in Pskovskaya Oblast and 32 enterprises in Novgorodskaya Oblast, have been subordinated to the Sovnarkhoz. It will employ more than 1,000,000 persons producing about 50 billion rubles worth of output annually. Enterprises subordinate to the Sovnarkhoz will produce about 5 per cent of the USSR's entire industrial production and will constitute 76 per cent of the entire industrial production of the Leningrad

Economic-Administrative Region. Certain plants in the USSR, the production of which is deemed vital to the national defense and which were named in a secret list prepared by the USSR Council of Ministers, remain under direct central administration. It is not known how many of these plants are located in the Leningrad Economic-Administrative Region. However, in cases where the retained USSR Ministries lose operational control of plants formerly subordinate to them, they will be able to influence production as they have been charged with the planning and coordinating function of these plants - tasks relinquished by USSR Gosplan. Eight All-Union Ministries were retained under the USSR Council of Ministers. On 14 December 1957, 4 of these Ministries (Aviation Industry, Defense Industry, Radio Technology, and Shipbuilding) were abolished and the following Committees, attached to the USSR Council of Ministers, were formed: Aviation Technology, Defense Technology, Radio-Electrical, and Shipbuilding.

In the Economic-Administrative Region the following functional subdivisions have been formed in the apparatus of the Economic Council: department of chief mechanic and chief power engineer, department of technics of safety and industrial sanitation, administration of material-technical supply and sales, transportation administration, department of capital construction, technical administration, planning and economics administration, department of labor and wages, finance department, central bookkeeping, economic administration, chancellary, administration of cadres and educational institutions, department of foreign orders (probably inter-Sovnarkhoz trade), department of cooperation and specialization, and department of security.

The following branch industrial administrations have been formed under the <u>Sovnarkhoz</u>: heavy machine building, general machine building, electrotechnical industry, chemical industry, instrument building industry, metallurgical industry, shipbuilding industry, radiotechnical industry, lumber industry, wood-processing and furniture industry, cellulose-paper and hydrolysis industry, textile industry,

leather-footwear and fur industry, garment industry, food industry, fish industry, meat and milk industry, printing industry, construction materials, glass and porcelain industry, construction, and power and fuel. In the organizations of the branch administrations are included not only the enterprises but also the scientific-research institutes, construction bureaus, and planning organizations which are an integral part of the industry. The plan does not provide for the formation of any intermediate organizations, such as trusts or combines.

The reorganization includes the merger of 68 supply and 15 marketing organizations, employing 6,600 workers and employees, to be under the functional administration of material-technical supply and sales within the <u>Sovnarkhoz</u>. All operational work of supplying enterprises and marketing their output will be done through 16 specialized administrations. The administrations will organize a network of retail stores to meet the requirements of industry. A Transportation Administration will be organized to establish the transportation needs of the various enterprises, and to formulate the necessary shipment plans and procedures.

Most of the construction in the Economic-Administrative
Region, with the exception of construction in the city of Leningrad,
will be administered by the Construction Administration under the
Sovnarkhoz. The Chief Directorate for Construction in the city of
Leningrad, under the jurisdiction of the City Soviet Executive Committee,
will continue to supervise construction within the city.

There are 76 research institutes and about 100 different branch planning and design organizations, with more than 100,000 persons on their staffs, in Leningrad City and Oblast. It has been recommended that all of them, except 19, be subordinated to the Sovnarkhoz. Further, it is planned that those technical and research institutes that were attached to now-abolished ministries should be made subordinate to the respective branch administration under the Sovnarkhoz. It has been recommended that the 19 large institutes and

planning organizations in Leningrad, which are important to the nation as a whole, should be subordinated directly to the State Scientific-Technical Committee of the USSR Council of Ministers or the USSR Gosplan.

II. Population, Labor Force, and Ethnic Composition

The principal characteristics of the 1959 population estimates of the Leningrad Economic-Administrative Region are summarized in Table V.

TABLE V

SUMMARY OF DEMOGRAPHIC CHARACTERISTICS: 1959

Total population
Population in working ages (16-59 years)
Military personnel
Proportion of Slavs to total population

The Economic-Administrative Region comprises 3 oblasts: Leningrad-skaya, Novgorodskaya, and Pskovskaya, and the city of Leningrad. The city of Leningrad, also designated Administrative area "A" in Table XV, includes the city proper, and the cities, towns, urban settlements, and selsoviets subordinate to the city or to the urban rayons of the city. The Economic-Administrative Region contains 3.0 per cent of the population of the USSR, and 5.3 per cent of the population of the RSFSR.

The Economic-Administrative Region had a calculated 1926 population of 5,484,000, of which 39.4 per cent was urban. The city of Leningrad contained 78.2 per cent of the urban population and 30.8 per cent of the total regional population.

The total population of the region by 1939/40 had increased to 7,346,000 or, 40 per cent above the 1926 total population. Most of this increase, about 81 per cent, was in the population of the city of Leningrad. The city grew much faster than the remaining areas of the Economic-Administrative Region because of its development as one of the most significant industrial, educational, and cultural centers of the USSR. In the 1926-39 period, Leningradskaya Oblast received 1,300,000 in-migrants. Most of these, about a million, went to the city of Leningrad. Many of the in-migrants came from within the Economic Region, and as a result the population of Pskovskaya Oblast decreased and that of Novgorodskaya Oblast increased only about 5 per cent (see Table VI). The population of Leningradskaya Oblast increased about 45 per cent, most of the increase occurring in the rayons near the city of Leningrad.

The population of the region, and particularly that of the city of Leningrad, suffered severe losses during World War II. The regional total population decreased during the war period due to 3 factors: excess deaths, decreased births, and evacuation. The total population between 1939-1956 declined by 1,295,000 or, 17.6 per cent. Each of the administrative divisions of the region shows a decrease (see Table VI). The population of the city of Leningrad was decimated during World War II. In the first year of the siege 600,000 persons were reported to have died; for the whole period the number of deaths is estimated to have totaled one million, or almost one-third of the 1939 population. At the height of the siege, infant mortality reached 75 per cent. An estimated one million persons evacuated the city. Thus, by the end of the war, the population pattern of the city and of

TABLE VI

POPULATION CHANGES 1926-1959 (in thousands)

Administrative Divisions	Total	Urban	Per Cent <u>Urban</u>	Rural	Per Cent Rural	
	:	1926				
Leningrad City Leningrad Oblast Novgorodskaya Oblast Pskovskaya Oblast	1,690 ¹ / 1,026 1,068 1,700	1,690 186 146 <u>138</u>	100.0 18.1 13.7 8.1	840 922 1,562	81.9 86.3 91.9	
Regional Total	5,484	2,160	39•4	3,324	60.6	
	<u>1</u>	939/40				
Leningrad City Leningradskaya Oblast Novgorodskaya Oblast Pskvoskaya Oblast	3,191 1,486 1,122 <u>1,547</u>	3,191 514 207 207	100.0 34.6 18.4 13.4	972 915 1,340	65.4 81.6 86.6	
Regional Total	7,346	4,119	56.1	3,227	43.9	
	Apr	11 1956				
Leningrad City Leningradskaya Oblast Novgorodskaya Oblast Pskovskaya Oblast	3,176 ² / 1,162 718 995	3,176 563 256 240	100.0 48.5 35.7 24.1	599 462 755	51.5 64.3 75.9	
Regional Total	6,051	4,235	70.0	1,816	30.0	
<u>1959</u>						
Leningrad City Leningradskaya Oblast Novgorodskaya Oblast Pskovskaya Oblast Regional Total	3,296 1,225 731 1,022	3,296 ² 632 262 252 4,442	100.0 51.6 35.8 24.7	593 469 770	48.4 64.2 75.6 29.2	
<u> </u>	,	.,	• -		-	

This figure is the 1926 population of Leningrad within the 1939 administrative boundaries. The 1926 population of Leningrad within the 1926 boundaries was 1,614,000.

the region had been considerably altered. Soviet reports indicate that the postwar population of the city is predominantly non-Leningradian,

^{2/} This figure is for January 1, 1956.

^{2/} The estimated 8,000 population of 5 selsoviets located within the Leningrad City Administrative Area, has been treated as urban population inasmuch as the Soviets treat the population in the Leningrad Administrative Area as a concentration of urban population.

that is, the evacuees did not return in great numbers. Rather, people from surrounding villages filled the population vacuum existing in the city.

In 1939/40 the urban population of the region comprised 56.1 per cent; by 1959 the urban proportion has increased to an estimated 70.8 per cent of the total population. The city of Leningrad represents 74.2 per cent of the region's total 1959 urban population. The administrative area subordinate to the city of Leningrad has surpassed its 1939 population and has an estimated 1959 population of 3,296,000. Most of the growth in Leningrad in this period has taken place in the cities and settlements subordinate to the city. The city proper actually shows a decline in this period from 3,015,000 in 1939 to a reported population of 2,814,000 in April 1956 and to an estimated population of 2,875,000 in 1959. The urban areas subordinate to Leningrad increased from a total population of 161,000 in 1939 to 421,000 in 1959, an increase of 171 per cent.

Throughout the period 1926-56, the rural population of the region has shown a decline in absolute numbers as well as in per cent of total population. Evacuation, increased mortality, and postwar migration to urban areas accelerated the decline of the rural population in the 1939-56 period. During this period the rural population decreased by 1,411,000 or 43.7 per cent. Since 1956 the rural population has increased an estimated 16,000, probably due to the increased effort to improve agricultural output and also due to the effort to restrain any large-scale growth of the city of Leningrad.

In relation to population growth and food supply it is doubtful if the Soviets can afford to rely upon the rural areas of the Economic-Administrative Region for additional industrial manpower. The region at the present time does not produce sufficient food to supply the heavily urbanized area around the city of Leningrad. Any additional drain on rural manpower would worsen the situation. On the other hand, the city of Leningrad is fast approaching the maximum population

(3,500,000) that the Soviets have planned for the city. If it is possible to limit the size of the city of Lemingrad to 3,500,000 persons, any additional large-scale growth probably will take place in the urban areas bordering the administrative area. The rate of urban growth, though, probably will decline, as it has in the USSR as a whole. In the Economic-Administrative Region this will result from the fact that the urban growth has drawn heavily on the rural population and the present supply of rural manpower is no longer as abundant. Since the rural areas of the region formally supported a much larger population, and there is now a new increased emphasis on agricultural production, it is reasonable to expect that the rural population will increase rather than decrease as it did in the 1939-56 period.

The age-sex composition of the region was fundamentally altered during the war period. Changes in the age-sex composition were the result of the same factors that affected the total population, e.g., high wartime mortality; reduced natality; and a postwar influx of persons in the working ages.

Table VII indicates that the 0-15 age group is smaller, especially in the city of Leningrad, as a result of the decline in the birth rate. The decline would have been even greater if there had not been a decline of infant mortality offsetting to some extent the decline in the birth rate. Higher wartime mortality of older people in the city of Leningrad is reflected in the lower proportion in this age group in the city. Due to the lack of reliable statistics, and also to the relatively small number in the 60 plus age group, the over-all USSR proportion age 60 plus has been assigned to this age group in the 3 oblasts. Wartime and postwar conditions have accentuated the proportion of the population in the working ages, 16-59.

The sex composition of the region is 113 females to 100 males, the same as for the USSR in 1958. In Novgorodskaya and Leningradskaya Oblasts the sex composition is the same as the over-all regional composition; in Leningrad City and Pskovskaya Oblast the composition

TABLE VII

ESTIMATED AGE AND SEX COMPOSITION: 1959 (Numbers in thousands)

()							
Age Group	Males	<u>Females</u>	<u>Total</u>	Per Cent			
Leningrad Economic-Administrative Region							
0-15	741	741	1,482	23.6			
16-59 60 plus	2,027 <u>178</u>	2,332 <u>255</u>	4,359 <u>433</u>	69•5 <u>6•9</u>			
		3,328	6,274	100.0			
Total	2,740	<i>عمرور</i>	0,4				
	<u>Len</u>	ingrad Cit	<u>y</u>				
0-15	344	344	688	22.2			
16-59	1,125	1,279	2,404	72.9			
60 plus	84	120	204	6.2			
Total	1,553	1,743	3,296	100.0			
	Lening	radskaya	Oblast				
0-15	167	167	334	27.3			
16-59	368	429	797	65•0			
60 plus	_39	_55	94	<u> </u>			
Total	574	651	1,225	100.0			
	Novgo	rodskaya O	<u>blast</u>				
0-15	99	99	198	27.0			
16-59	220	257	477	65•3			
60 plus	23		<u>56</u>	<u>_7.7</u>			
Total	342	389	731	100.0			
Pskovskaya Oblast							
0-15	131	131	262	25.6			
16-59	314		681	66.6			
60 plus	32	•	79				
-		_					
Total	L 477	545	1,022	100.0			

is 112 and 114 females to 100 males, respectively. In the age group 16-59, the regional sex ratio is 115 females to 100 males, whereas, for the same age group in the USSR (1958) the ratio is 117 females to 100 males.

Vital rates (birth, death, and natural increase) are available for Leningrad City and Oblast only (see Table VIII). The most outstanding

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TABLE VIII

BIRTH, DEATH, AND NATURAL INCREASE RATES: 1940-56

Year	Births Per 1,000 Population	Deaths Per 1,000 Population	Net Population Increase per 1,000 Population
		USSR	
1940 1950 1951 1952 1953 1954 1955	31.7 26.5 26.8 26.4 24.9 26.5 25.6 25.0	18.2 9.6 9.6 9.3 9.0 8.9 8.2 7.7	13.4 16.9 17.2 17.1 15.9 17.5 17.2
	Ţ	eningrad City	
1940 1950 1951 1952 1953 1954 1955	25.1 15.8 15.9 15.9 15.0 15.7 15.2 13.9	18.4 7.2 6.7 6.8 6.6 6.5 6.7	6.7 8.6 9.2 9.1 8.4 9.2 8.5 7.2
	Leni	ngradskaya Ob	last
19401/ 1950 1951 1952 1953 1954 1955 1956	27.7 27.9 27.3 25.8 26.8 25.2 22.8	9.1 8.9 8.4 8.3 8.0 7.8 7.3	18.6 19.0 18.9 17.5 18.8 17.4

^{1/} Vital rates for this year for Leningradskaya Oblast are not available.

aspect is the radical decline of the birth rate in the city. The crude birth rate has declined 44.6 per cent since 1940 and 12 per cent since 1950 in the city. In the oblast the crude birth rate has declined 17.7 per cent since 1950. The crude death rate has declined less spectacularly, 7 per cent in the city and 19.8 per cent in the oblast since 1950. The natural increase rate has remained relatively stable in both the city and oblast.

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TABLE IX

ESTIMATED ETHNIC COMPOSITION: 1959

Ethnic	Number	Per Cent							
Region									
Great Russians Others	5,847,000 427,000	93 7							
Total	6,274,000	100							
Leningrad City									
Great Russians Others	3,065,000 231,000	93 							
Total	3,296,000	100							
Leningradskaya Oblast									
Great Russians Others	1,102,000 123,000	90 10							
Total	1,225,000	100							
Novgorodskaya Oblast									
Great Russians Others	710,000 21,000	97 3							
Total	731,000	100							
Pskovskaya Oblast									
Great Russians Others	970,000 52,000	95 5							
Total	1,022,000	100							
									

One of the most striking features in the region is the homogeneous ethnic composition. Great Russians predominate in both urban and rural areas of the region and in none of the administrative areas of the region is the per cent of Great Russians less than 90 (see Table IX). The other ethnic groups comprise Jews, Finns, and Estonians. Finns are to be found in each administrative-division of the region; Estonians are found in Leningrad City and Oblast and in Pskovskaya Oblast. Jews, located mainly in Leningrad City, number about 115,000, or 3.5 per cent of the city's population.

The regional total labor force and the total labor force by

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° Divisions	Workers and Employees	Collective and Individual Farmers	Military	Co-operative and Non-co-operative Handicraftsmen	Others1/	Total	Per Cent of Total Population
Regional Total	2,485,000	517,000	266,000	131,000	53,000	3,452,000	55.0
Leningrad City Leningradskaya Oblast Novgorodskaya Oblast Pskovskaya Oblast	1,705,000 360,000 207,000 213,000	112,000 135,000 270,000	130,000 85,000 18,000 33,000	86,000 21,000 12,000 12,000	34,000 10,000 4,000 5,000	1,955,000 588,000 376,000 533,000	59•3 48•0 51•4 52•2

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Includes persons who by definition are excluded from reported categories (defense workers, full-time Party and Komsomol officials, and self-employed persons).

administrative-territorial divisions are shown in Table X. The region's total labor force (including military) represents 55 per cent of the region's total population; the civilian labor force represents 53 per cent of the region's civilian population.

The labor force of the city of Leningrad comprises a high proportion of the resident population, about 59.3 per cent. It is estimated that about 3 per cent of the labor force of the city are commuters from contiguous areas of Leningradskaya Oblast and as a result the labor force of the oblast is only 48 per cent. Throughout the region a significant part of the rural population is engaged in work in industrial or trade enterprises in the nearest city or workers settlement.

Workers and employees represent 72 per cent of the region's total labor force. The majority of workers and employees are located in urban areas, but in Novgorodskaya and Pskovskaya Oblasts, both having a large proportion of the population in rural areas, a much larger proportion of the workers and employees are in the rural areas than in Leningradskaya Oblast. The distribution of workers and empoyees by sector of employment is available for Leningrad City and Oblast only, and is shown in Table XI.

Industry commands the largest segment of workers and employees in the urban areas; the distribution of workers and employees in industry is shown in Table XII. The percentual distribution of industrial workers and employees by sectors of employment in the city of Leningrad has remained relatively constant in relation to the prewar distribution. This is not the case in Leningradskaya Oblast. The percentage of workers in the peat industry has decreased almost 50 per cent since 1940; that of workers in the shale industry has increased by 50 per cent; and the percentage of workers in the paper and construction materials industries has increased by 68 and 82 per cent, respectively. The other categories of industry have shown much less pronounced increases or decreases.

TABLE XI

DISTRIBUTION OF WORKERS AND EMPLOYEES
BY SECTOR OF EMPLOYMENT: 1959

(numbers in thousands)

	Le	ningrad Ci	ty	Leningradskaya Oblast			
	Number	Per Cent of Total	Per Cent Female	Number	Per Cent of Total	Per Cent	
	MUMBEL	or rotar	Louisite	Mamper	OI IOUAL	1000	
Industry	825.2	48.4	55	132.8	36.9	47	
Construction	104.0	6.1	39	24.1	6.7	37	
Rural Economy				49.7	13.8		
Sovkhoz				(40.1)	(11.1)	54	
mts				(9.7)	(2.7)	15	
Transportation	143.2	8.4		43.6	12.1	****	
Railroad	(46.0)	(2.7)		(16.2)	(4.5)		
Water	(12.0)	(0.7)	45	(5.4)	(1.5)	42	
Motor Vehicle							
and other	(85.2)	(5.0)		(22.0)	(6.1)		
Communication	15.3	0.9		5•0	1.4		
Trade, Procure-							
ment, and Supply	88.6	5.2	73	15.1	4.2	73	
Public Dining	37•5	2.2	84	6.5	1.8	91	
Education	172.2	10.1	64	25.9	7.2	79	
Art	8.5	0.5	54				
Public Health	78.4	4•6	91	22.3	6.2	86	
Credit and Insur-							
ance Institute	7.0	0.4	67	1.5	0.4	66	
Government	20.5	1.2		6.1	1.7		
Other 1	204.6	12.0		27.4	7.6		
Total	1,705.0	100.0		360.0	100.0		

I Includes employment in geological prospecting organizations, drilling, capital repairs, forestry, municipal housing, and other types of enterprises.

The number of specialists with higher education in Leningrad City and Oblast is shown in Table XIII. In the city the number of engineers has increased 61 per cent since 1941 and represents the largest category of professionals. The large number of teachers, university graduates, and library and cultural educational workers is indicative of the city's prominent position as a research, educational, and cultural center in the USSR. The number of semiprofessionals in the city has almost doubled since 1941. Among the semiprofessionals, the number of technicians in the city has more than doubled since 1941 (see Table XIV) and now comprises more than 50 per cent of all semiprofessionals. In Leningradskaya Oblast

TABLE XII
WORKERS AND EMPLOYEES BY BRANCH OF INDUSTRY: 1959

	Number (in thousands)	Per Cent of Total							
Leningrad City									
Machine building									
and metalworking	418.4	50•7							
Electric power stations	1	, , ,							
and systems	4.1	0.5							
Chemical.	23.1	2.8							
Rubber asbestos	28.9	3.5							
Woodworking and paper	33.8	4.1							
Construction materials	19.0	2.3							
Garment	42.1	5.1							
Textile	92•4	11.2							
Leather, fur, and footwear	41.3	5. 0							
Food	36•3	4•4							
Other	85.8	10.4							
Total	825.2	100.0							
Len	ingradskaya Oblast								
Peat	9•7	7•3							
Shale	4.0	3.0							
Electric power stations									
and systems	2.8	2.1							
Machine building and									
metalworking	13.9	10.5							
Lumbering	25.8	19.4							
Paper	11.4	8.6							
Woodworking	7.6	5•7							
Construction materials	15.0	11.3							
Bricks	(5.2)	(3.9)							
Food	10.4	7.8							
Others	32.2	24.3							
Total	132.8	100.0							

the number of semiprofessionals is available for 1 July 1955 only.

Teachers, library and cultural educational workers, and medical workers comprise 65 per cent of the semiprofessionals in the oblast.

The average over-all and rural population density of the region is 84.6 and 24.8 persons per square mile, respectively (see Table XV and Map III). The rural density of the Leningrad City Administrative Area is calculated at 21.6 persons per square mile but since the administrative area contains such a large concentration of population this figure in actuality has little significance. The over-all density

TABLE XIII
SPECIALISTS WITH HIGHER EDUCATION

Category	1 Janu	ary 1941 Per Cent of Total	1 July	Per Cent of Total
	Leningrad	City		
Engineers Agronomists, zoo-	33,100	44	53,400	47
technicians, veter- inarians, foresters Economists, statisti-	1,700	2	2,100	2
cians, commodity experts Lawyers Doctors	5,100 1,100 10,000	7 2 13	7,500 2,300 15,800	7 2 14
Teachers and university graduates, library and cultural	10,000	~	2,,222	·
education workers	18,500	25	25,100	_22
Total	74,900	100	113,800	100
<u>I</u>	ningradska	aya Oblast		
Engineers Agronomists Zootechnicians,			3,296 648	26 5
veterinarians, foresters Doctors Other specialists ² /			681 1,966 <u>6,272</u>	5 15 <u>49</u>
Total			12,863	100

¹ Other than lawyers, doctors, and economists.

of the administrative area is 6,865.2 persons per square mile. The rayons of Leningradskaya Oblast that are contiguous to the Leningrad City Administrative Area also have relatively high rural and over-all densities (see Map III). In general, densities in the Economic-Administrative Region are highest in the W and decrease as one moves eastward. The lowest densities in the Region are in Novgorodskaya Oblast and in the N-E part of Leningradskaya Oblast.

^{2/} Probably includes teachers, university graduates (see footnote above), library and cultural education workers, and other specialists.

TABLE XIV
SPECIALISTS WITH SECONDARY EDUCATION

	1 Janu	ary 1941	1 Ju	ly 1955
Category	Number	Per Cent of Total	Number	Per Cent of Total
	Leningrad	City		
Technicians Agronomists, zoo- technicians, veteri- nary assistants.	19,200	41	43,200	51
foresters Statisticians, plan- ners, commodity	300	1	1,000	1
specialists Medical workers Teachers, library and cultural educa-	2,100 15,600	5 33	5,700 20,600	7 24
tional workers	4.900	10	8,500	10
Total	47,200	100	84,800	100
Len	ingradska	ya Oblast		
Technicians Agronomists Zootechnicians, veterinarians, feldshe veterinarian tech-	 rs,		5 , 169 8 <i>5</i> 2	25 4
nicians Foresters Medical workers Other specialists	 		816 300 5,963 7,376	4 2 29 36
Total	****		20,476	100

^{1/} Probably includes teachers, library and cultural educational workers, and other specialists.

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·					1	Density
Administrative-Territorial	Area	Population	n (in th	nousands)	(Persons	per Sq. Mile)
Division	(Sq. Miles)	Urban	Rural	Total	Rural	Over-all
Leningradskaya Oblast (without Leningrad City Administrative Area) Novgorodskaya Oblast Pskovskaya Oblast	28,410.9 ¹ / 19,660.0 20,580.0	632.0 262.0 252.0	593.0 469.0 770.0	1,225.0 731.0 1,022.0	20.9 23.9 37.4	43.1 37.2 49.7
Rayons:						
Leningradskaya Oblast						
Boksitogorskiy	1,113.9	15.0	20.7	35•7	18.6	32.0
Gatchinskiy	1,111.9	82.0	33.4	115.4	30.0	103.8
Kapshinskiy	1.387.2		23.8	23.8	17.2	17.2
Kingiseppskiy	1.146.3	15.0	23.8	38.8	20.8	33.8
Kirishskiy	1,113.1	12.0	19.1	31.1	17.2	27.9
Lesogorskiy	776.0	20.0	9.5	29.5	12.2	38.0
Lodeynopolskiy	1.729.7	30.0	27.0	57.0	15.6	33.0
Lomonosovskiy	806.5	42.0	33.4	75.4	41.4	93.5
Luzhskiy	1.213.1	35.0	35.0	70.0	28.9	57.7
Mginskiy	987.2	71.0	15.9	86.9	16.1	88.0
Novoladozhskiy	1,450.2	16.0	39.7	55.7	27.4	38.4
Oredezhskiy	731.3	3.0	22.3	25.3	30.5	34.6
Osminskiy	749.4		36.6	36.6	48.8	48.8
Podporozhskiy	1.849.8	23.0	20.7	43.7	11.2	23.6
Priozerskiy	822.4	12.0	12.7	24.7	15.4	30.0
Roshchinskiy	1.019.7		15.9	15.9	15.6	15.6
Slantsevskiy	524.7	16.0	9.5	25.5	18.1	48.6

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TABLE XV (Continued)

						ensity
Administrative-Territorial	Area	Populatio	n (in th	ousands)	(Persons	per Sq. Mile)
Division	(Sq. Miles)	Urban	Rural	Total	Rural	Over-all
				7.0	077.0	27.9
Sosnovskiy	570.6		15.9	15.9	27.9	32 . 4
Tikhvinskiy	1,303.8	20.0	22.3	42.3	17.1	52•5
Tosnenskiy	1,389.2	46.0	27.0	73.0	19.4	14.1
Vinnitskiy	1,129.7		15.9	15.9	14.1	103.4
Volkhovskiy	637•4	50.0	15.9	65.9	24.9	38 . 1
Volosovskiy	957•9	11.0	25.5	36.5	26.6	
Vsevolozhskiy	1,159.8	36.0	20.7	56.7	17.8	48.9
Vyborgskiy	988.4	77.0	23.8	100.8	24.1	102.0
Yefimovskiy	1,741.7		27.0	27.0	15.5	15.5
Leningrad Administrative	-					
Area - Area "A"						
City	109.0	2,875.0		2,875.0		
Remainder	371.0	413.0	8.0	421.0	21.6	
Novgorodskaya Oblast						
Batetskiy	600.0		14.4	14.4	24.0	24.0
Belebelkovskiy	460.0		14.4	14.4	31.3	31.3
Borovichskiy	730.0	51.0	24.2	75.2	33.1	103.0
Chudovskiy	890.0	12.0	13.3	25.3	14.9	28.4
Demyanskiy	820.0		21.8	21.8	26.6	26.6
Dregelskiy	1,150.0		18.1	18.1	15.7	15.7
Khvoyninskiy	1.190.0	2.0	14.4	16.4	12.1	13.8
Krestetskiy	850.0	9.0	25.4	34.4	29.9	40.5
	560.0	,	13.3	13.3	23.8	23.8
Lychkovskiy Lyubytinskiy	590 . 0	6.0	18.1	24.1	30.7	40.9
	1.410.0	20.0	25.4	45.4	18.0	32.2
Malovisherskiy	680.0	20.0	16.9	16.9	24.9	24.9
Malvotitskiy	880.0		27.8	27.8	31.6	31.6
Mosherskiy	610.0	4.0	12.2	16.2	20.0	26.5
Mstinskiy Novgorodskiy	1,070.0	61.0	19.3	80.3	18.0	74.9
-						

TABLE XV (Continued)

						ensity
Administrative-Territorial	Area	Populatio	n (in th	ousands)	(Persons	per Sq. Mile)
Division	(Sq. Miles)	Urban	Rural	Total	Rural	Over-all
DIVIDION	1-1-					
Okulovskiy	980.0	33.0	30.2	63.2	30.8	64.5
Opechenskiy	510.0		14.4	14.4	28.2	28.2
Pestovskiv	770.0	9.0	23.0	32.0	29.9	41.6
Poddorskiy	680.0		12.2	12.2	17.9	17.9
Polavskiy	470.0		7•3	7.3	15.5	15.5
Shimskiy	430.0		12.2	12.2	28.4	28.4
Soletskiy	380.0	9.0	12.2	21.2	32.1	55.8
Starorusskiy	870.0	40.0	20.5	60.5	23.6	69•5
Utorgoshskiy	400.0		9•7	9•7	24.2	24.2
Valdayskiy	860.0	6.0	23.0	29.0	26.7	33.7
Volatovskiy	380.0		14.4	14.4	37.8	37.8
Zaluchskiy	440.0		10.9	10.9	24.7	24.7
Lake Ilmen	345.0					
Pskovskaya Oblast						
	100.0		21.7	21.7	45.2	45.2
Ashevskiy	480.0 510.0		20.3	20.3	39.8	39.8
Bezhanitskiy			21.7	21.7	38.1	38.1
Dedovichskiy	570 . 0	10.0	17.3	27.3	40.2	63.5
Dnovskiy	430.0	10.0	19.5	29.5	38.2	57.8
Gdovskiy	510.0	4.0	18.5	22.5	31.8	38.8
Idritskiy	580.0	•	15.2	15.2	66.1	66.1
Kachanovskiy2/	230.0		13.0	13.0	37.1	37.1
Karamyshevskiy	350.0	4.0	15.0	19.0	28.8	36.5
Kholmskiy	520.0	4.0	11.8	11.8	23.1	23.1
Krasnogorodskiy	5 1 0.0		13.4	13.4	40.6	40.6
Kudeverskiy2/	330.0		20.3	20.3	35.6	35.6
Kuninskiy	570.0	4.0	16.8	22.8	39.1	53.0
Loknyanskiy	430.0	6.0	13.0	13.0	19.7	19.7
Lyadskiy	660•0		10.0	٥.	-/•1	-/

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TABLE XV (Continued)

Administrative-Territorial	Area (Sq. Miles)	Population Urban	on (in th Rural	ousands) Total		Density per Sq. Mile) Over-all
Nevelskiy Novorzhevskiy Novoselskiy²/ Novosokolnicheskiy Opochetskiy Ostrovskiy Palkinskiy Pavskiy Pechorskiy Ploskoshskiy Ploskoshskiy Plyusskiy Potherezinskiy Polnovskiy²/ Porechenskiy Porechenskiy Pozherevitskiy²/ Pskovskiy Pushkino-Gorskiy Pustoshkinskiy Pytalovskiy Sebezhskiy Seredkinskiy²/			Rural 20.3 28.2 13.0 18.5 23.6 23.6 17.3 10.8 28.2 11.0 13.4 10.8 15.0 23.9 15.2 34.7 19.6 20.3 21.7 18.5 15.2 21.7	Total 48.3 31.2 13.0 27.5 33.6 37.9 17.3 10.8 33.2 11.6 13.4 10.8 15.0 31.9 15.2 105.7 19.5 24.3 24.7 26.5 15.2 21.7		
Slavkovskiy Soshikhinskiy Strugo-Krasnenskiy Ustynskiy	410.0 470.0 440.0		17.3 13.0 13.4	17.3 13.0 13.4	42.2 27.7 30.6	42.2 27.7 30.6

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					Density		
Administrative-Territorial	Area	Populatio	on (in th	nousands)	(Persons	per Sq. Mile)	
Division	(Sq. Miles)	Urban	Rural	Total	Rural	Over-all	
Usvyatskiy	410.0		13.4	13-4	32.7	32.7	
Ust-Dolysskiy	380.0		15.0	15.0	39•5	39•5	
Velikolukskiy	690.0	55.0	21.9	76.9	31.7	111.4	
Lake Peipus	730.0						

a) Kachanovskiy, its territory transferred to Palkinskiy and Pechorskiy Rayons.

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- b) Kudeverskiy, its territory transferred to Bezhanitskiy, Opochetskiy and Pustoshkinskiy Rayons.
- Novoselskiy, its territory transferred to Pskovskiy and Strugo-Krasnenskiy Rayons.
- d) Pozherevitskiy, its territory transferred to Ashevskiy and Dedovichskiy
- e) Polnovskiy, its territory transferred to Gdovskiy Rayon.
- f) Seredkinskiy, its territory transferred to Gdovskiy and Pskovskiy Rayons.

^{2/} These rayons were abolished 14 January 1958 after this work had been completed. No map is as yet available showing the new rayon boundaries, so the computations and accompanying graphics show them as they were. A list of the rayons that were abolished, and the rayons to which they were transferred, follows:

III. Psychological and Sociological Factors

A. Political and Social Tensions

No evidence has been found indicating any significant potential for disaffection in the Leningrad Economic-Administrative Region. Certain internal stresses and strains exist in the area; they are tensions, however, that unless they are extremely aggravated, will not lead to disaffection. Most of these tensions concern the disparity between various classes in the society. Other tensions are centered around various facets of the Soviet system, such as strictures on freedom of thought. For purposes of discussion economic tensions will be discussed first although this does not necessarily indicate any established order of importance.

Economic. Stresses emanating from disparities in the standard of living exist in spite of the fact that the Economic-Administrative Region appears to enjoy relatively better living conditions than is evidenced in other sections of the Soviet Union. Those who do not share the relatively high standard of living, the rank-and-file worker and collective farmers, presumably resent the economic inequalities that exist between themselves and the favored segments of society, such as Party members, the military, bureaucrats, and professionals. In general, they resent the poor return for their labor and the constant pressure to increase production without any proportionate increase in benefits.

Within the Economic-Administrative Region, a wide disparity between urban and rural living standards exists. The standard of living in the city of Leningrad is higher than in most urban areas in the USSR. Calculations indicate that the city ranks 6th among all USSR cities in per capita expenditure on food items, and 7th in per capita expenditure on food and nonfood items. Housing, although by no means adequate, is superior to housing in most other cities in the USSR. Utilities are better developed and medical facilities are adequate.

In the remainder of the region, municipal and rural utilities are not as fully developed as in Leningrad. Medical facilities suffer from a shortage of trained personnel and adequate equipment. Calculations indicate that the oblasts comprising the region consume considerably less nonfood items than does Leningrad; 40 per cent less in Pskovskaya Oblast, 45 per cent less in Novgorodskaya Oblast, and 29 per cent less in Leningradskaya Oblast. This economic advantage of the urban worker gives rise to antagonisms between the urban and rural segments of the society. The collective farmer resents the fact that the urban worker benefits disproportionately from the economy. The collective farmer also resents the fact that his wage level is low and paid partly in kind; he feels that he is in the least favored sector of the Soviet economy.

The collective farmer's consolation is his "private plot."

Soviet statistics indicate that a large proportion of the vegetables and livestock grown and raised in the region comes from private plots. It is not unwarranted to deduce, therefore, that the government has permitted extensive private farming in order to meet the food requirements of the large urban concentration in and around the city of Leningrad. At the same time, criticism has been aimed at the low level of production on collective farms, indicating that the collective farmer is neglecting work on the collective farm in order to devote more time to his private plot.

In response to the various factors which have tended to increase tensions in the region, the Soviet government has undertaken measures that will help to alleviate some of these tensions. The minimum wage level has been raised and the work week is in the process of being reduced to 10 hours. Since 1956, a worker has been able to change jobs without his employer's permission, though he continues to pay a penalty in the form of loss of seniority. The collective farmer's plight has been improved somewhat by an increase in the price the state pays for crops, and abolition of obligatory deliveries to the

state. An apparently earnest effort is being made to increase the housing space in both urban and rural areas. Even among classes which have not benefitted to an appreciable extent from a rise in the standard of living, the improvement in health and educational services and public utilities over pre-Soviet times and even over the pre-World War II period, has probably reduced dissatisfaction.

Political. In the political sphere Lemingrad has a long history of political unrest. As the capital of Russia from 1713 to 1918, and as the first city to feel the impact of the Industrial Revolution, it was inevitably the scene of intrigues and conspiracies. Beginning with the Decembrist uprising in 1825, the city was the scene of social unrest through the remainder of the mineteenth century and into the twentieth century. During the revolution in 1917, Lemin had his headquarters in the city and incited the industrial workers and military personnel to revolt.

Although the capital was moved to Moskva in 1918, factions of the revolutionary Party in Leningrad, lead by Zinoviev, resisted the efforts of Stalin to gain absolute control over the Party. This resistance came to an end in February 1926, when a Stalinist apparatus was installed in Leningrad. Since 1926, events in Leningrad have continued to signal changes in the Party line or struggles among the top command in the Kremlin for control of the Party. The assasination of Kirov, Party secretary in Leningrad in 1934, allegedly by a former member of the Zinoviev opposition group, but possibly on direct orders of Stalin because of Kirov's increasing prestige, initiated a purge that was to extend throughout the USSR.

Again, in 1948, events following the death of Zhdanov revealed that a struggle had been going on between Zhdanov and Malenkov. Zhdanov and Malenkov appear to have been vying for Stalin's favor. After Zhdanov's death, all 5 secretaries in the Leningrad City and Oblast Party organization were purged. The charge made was that the Leningrad members had "nationalist tendencies," that is, Great Russian nationalism.

Following the execution of Beria in 1953, V. M. Andrianov was removed as First Secretary of the Leningrad Party organization, and Frol R. Kozlov, presumably with the backing of Khrushchev, was made First Secretary of the Oblast Party Committee. These changes in the Leningrad Party leadership, coming as they do with changes of the Party leadership in Moskva, are an indication of the importance the Leningrad Party leadership plays in national affairs.

Social. Some tensions within the region are an outgrowth of dissension between the intelligentsia and the regime.

Since Leningrad is one of the foremost educational and cultural centers in the USSR, it is not surprising that the strictures on freedom of expression are more resented here than in most other areas of the USSR.

After a period of relaxation of cultural controls during World War II, Leningrad was chosen as the place to reassert stricter Party control. On August 14, 1946, a resolution passed by the Central Committee of the Communist Party, accused 2 Leningrad authors and the magazines Zvezda and Leningrad, of literary heresy. The magazines were accused of publishing "ideologically harmful" works and of approving of art for art's sake. Andrey Zhdanov, Party chief in Leningrad, the Party spokesman on cultural matters, elaborated on the Central Committee's resolution. He further accused the Leningrad magazines of showing an enthusiasm for "the cheap modern bourgeois literature of the West," and stated: "We all love Leningrad, it must not become a refuge for all kinds of literary kibitizers (sic) and adventurers who want to use Leningrad for their purposes. Zoshchenko, Akhmatova / the authors who bore the brunt of the criticism, and their like do not hold Leningrad dear. They want to see in it the embodiment of a different socialpolitical order, of a different ideology."

The attacks on the literary publications and writers in Leningrad heralded a new era in Soviet literature, an era of increased Party control over all forms of literature. Dissatisfied intellectuals were forced into silence. Nevertheless, there have been indications that

the writers in Leningrad, particularly since Stalin's death, have continued to write articles and stories distasteful to the regime.

Reports have also indicated that a "cultural underground" exists in Leningrad. Books no longer published and generally not available in the Soviet Union are circulated among interested intellectuals and students.

In 1956, the unsettling influence of the events in Hungary and Poland were reflected in student unrest in Leningrad. Hungarian youths studying in Leningrad were said to have taken over a lecture meeting at the request of the participants and to have denounced Soviet intervention in Hungary. In December 1956, Leningradskaya Pravda indicated that there was continued dissatisfaction at Leningrad University, saying: "some demagogues and shouters among the students in the Faculty of Philology have been trying to make politically illiterate and even harmful statements." The newspaper accused the faculty of doing nothing about the situation.

Unrest among the intellectuals and students should not be taken as a sign that they are ready or willing, let alone, able to express dissatisfaction in a forcible way. But the rise in educational standards from which they benefit is equipping them to think for themselves, and this poses a definite threat to Party thought controls.

Another factor to consider is the geographical location of Leningrad. Located on the western periphery of the USSR and being a point of international entry, its population probably has more contact with the West and western ideas than any other city in the USSR with the possible exception of Moskva. Although these contacts are limited to a relatively small segment of the population (maritime sailors, military personnel, trade officials, etc.) the impressions acquired by these contacts are undoubtedly communicated to other segments of the population. Such contacts undoubtedly tend to lessen the effectiveness of Soviet indoctrination and may even cause a rejection, at least in

part, of the Soviet depiction of the West.

Whether or not the tensions discussed above would ever become so acute as to prompt disaffection on the part of the population is an open question. It should be recalled that Leningrad withstood great strains during World War II, the population displaying a remarkable cohesiveness during the German siege of the city.

B. Civil Defense

For a detailed description of the administrative structure of civil defense refer to Oblast Political and Population Surveys No. 67, Stalingradskaya Oblast, and No. 109, Komi ASSR. The administrative structure of civil defense, as explained in those surveys, is applicable to these 3 oblasts and the city of Leningrad.

The Voluntary Society for Cooperation with the Army, Air Force, and Navy (DOSAAF) is the most important civil defense training organization within the Leningrad Economic-Administrative Region, being charged with the responsibility of training its members and the general population in civil defense measures. In 1952 it was reported that training was to be given to the entire population, the goal to be met in 3 stages: first, the training of Communist Party members and Komsomols, second, the training of industrial workers, and third, the training of the remainder of the population. Since the fall of 1953 there has been evidence of indoctrination and training of the armed forces in nuclear war defense; in 1954, reports indicated that such training was extended to the general population. A recent DOSAAF report stated that 85 per cent of the population of the USSR had received at least 10 hours of civil defense training. At the present time, anti-atomic, chemical, and bacteriological warfare defenses are being emphasized.

Although there has been increasing attention given to civil defense measures and plans in the Soviet press in recent years, the extent to which such measures have actually been implemented in the Leningrad Economic-Administrative Region is not known. There are indications that a gap exists between theory and practice. Soviet press reports reveal

that there is insufficient civil defense activity in many areas; Party organizations and DOSAAF have been criticized for this inactivity. While the DOSAAF organization in the city of Leningrad was praised in January 1957, the DOSAAF organization in Pskovskaya Oblast was criticized for lack of useful activity. Again in May 1957, the Pskovskaya Oblast Committee of DOSAAF was censured for failing to fulfill its obligations with respect to training leadership and technical cadres.

The city of Leningrad undoubtedly is the focus of civil defense activity in the Econimic-Administrative Region, and it may be presumed that civil defense preparations in the city are at least equal to those in other major cities of the USSR. Therefore, although there is little specific information available about civil defense in Leningrad, certain assumptions may be made on the basis of reports about other cities. Air raid drills, for example, are conducted, although their frequency and scope are not known. Leningrad has a Planning Institute which issues instructions on shelter plans and since 1949 the standardized plans for the construction of all new buildings in the USSR have included cellar shelters. About 12 per cent of the multiple dwellings in Leningrad have been constructed since 1949; whether the standardized plans have been implemented generally in new structures is not known. Really effective cellar shelters considerably increase building costs, and it is known that much of the new construction throughout the USSR is already showing signs of disrepair, indicating that they probably are trying to cut costs rather than increase them. According to a report of a German scientists who worked in Leningrad until February 1954, there were no provisions for air raid protection in the cellars of many newly constructed housing blocks on a certain street with which he was familiar.

There is no evidence that large-scale public shelters are being constructed. In fact, the Economic Region, as a whole, is unsuited for the construction of underground installations, either of the bunker or tunnel type because of unfavorable relief, rock types,

and poor drainage. This does not necessarily rule out underground construction. The Leningrad subway, built at an average depth of 150 to 175 feet of reinforced concrete, and in swampy terrain, is an excellent public shelter. Its present length is 6.7 miles, and an additional length of 2.1 miles is under construction and scheduled to be completed in 1958. A second line, the first part of which will be 2.9 miles is in the planning stage. Thus, its capacity as a shelter is increasing. In addition to its shelter value, the Leningrad subway would have great significance as a transportation and communications artery if the city were under attack, since it connects the most important industrial and transportation points in Leningrad.

Because of the presence of numerous military installations in and near Leningrad, the population would undoubtedly receive advance warning of an attack through the media of sirens or radio. The city of Leningrad has adequate radio communications, mainly in the form of wired loudspeakers. DOSAAF, which trains many of its members as radio operators and technicians, could supply personnel to supplement the regular communications staffs.

Plans, if any, for a large-scale evacuation of the population of the Leningrad metropolitan area, the major military target in the Economic-Administrative Region, are not known. It is unlikely that any significant mass evacuation would be made N, N-W, or S-W, toward the border areas of the USSR. Judging from what happened in 1941-1944, when approximately one million people were evacuated, it seems that the most probable routes of evacuation would be to the E and the SE, into the interior of the country. In any case, evacuation by vehicle or by foot during most of the year would be beset by difficulties. Throughout most of the region, with the exception of an area in the extreme southern part, cross-country movement of vehicles would be rendered difficult because of the presence of numerous swamps, marshes, lakes, forests, and rock-strewn slopes. The most favorable time, if large-scale cross-country vehicular movement were necessary, would be during the winter

months, roughly from December to April, when the marshes and bogs are frozen, and in the mud-free period of summer, August and September. In winter, deep snows would make foot travel exceedingly difficult.

Although the many swamps and forest areas in the region are barriers to evacuation, they do possess some civil defense utility in that they provide natural cover.

The most probable evacuation routes would be on or along the railroad and primary highway running S-E from Leningrad through Novgorod to Moskva; along the double-track Leningrad-Moskva rail line, running S-E out of Leningrad through Chudovo; or along the Leningrad-Pestovo or Leningrad-Tikhvin rail lines, both running in an easterly direction. Since the road network in the eastern part of Leningrad-skaya and Novgorodskaya Oblasts is very poor, and the area is forested and swampy, evacuees would be forced to depend on rail transportation or, if on foot, follow closely the rail lines or river routes.

The latter offer one of the best evacuation routes, either in summer or winter. The Volga-Baltic Waterway (formerly the Mariinsk Waterway) runs from the Baltic Sea to Lake Ladoga via the Neva River, then via the Svir River and Novalodozhskiy Canal, around the southern tip of Lake Onega and connects with the Volga River at the Rybinsk Reservoir. The Volkhov River, connecting Lake Ladoga and Lake Ilmen, offers a possible water evacuation route to the S. The use of Waterways as an extremely vital means of transportation was demonstrated during the siege of Leningrad in World War II. During the 1942 navigation season while Leningrad was in its second year of siege with the main railroads between it and the rest of the USSR cut, the river fleet brought 744,000 tons of freight into the city by waterway and shipped out about 304,800 tons; almost 800,000 persons were also moved into or out of the city by water. In addition, an ice-highway across Lake Ladoga in the winter of 1941-1942 was used to transport food and freight by truck.

Air facilities in and near Leningrad would play a vital part

in evacuating key personnel, provided sufficient warning of an attack were received. These and rail facilities would not be available in sufficient quantity for use by the general population.

C. Medical Facilities

The number of doctors, medical assistants, and hospital beds in the Leningrad Economic-Administrative Region exceeds both the RSFSR and USSR averages. This is due mainly to the above-average number of medical personnel and facilities in Leningrad City and Oblast, which more than compensates for the below-average ratio of most medical services in Novgorodskaya and Pskovskaya Oblasts (see Table XVI).

The city of Leningrad is the major medical treatment center in the region and one of the USSR's major medical research centers. The city had, in 1956, 143 hospitals of various kinds, with 34,298 beds. In 1952 (figures for a later date are not available) the city had 12 permanent tuberculosis hospitals (1,135 beds), 5 psychoneurosis hospitals (3,300 beds), and 14 maternity houses (2,100 beds), all of which are included in the total number of hospitals. In addition, there were, in 1956, 26 sanitaria and 35 rest homes with a total of 9,889 beds. The number of polyclinics, including those located in hospitals, was 269 in 1956. In 1952 numerous dispensaries were reported, including 22 for the prevention of tuberculosis; 19 for skin and venereal diseases; 10 for psychoneurosis; and, in addition, one city and 20 rayon (ward) epidemic stations. A 1953 report indicates that Leningrad had 22 medical research institutions and training schools, including the country's largest military hospital. This institution, the Kirov, is the most important military medical school in the USSR and the research center of the Military Medical Service of the Soviet Army.

Despite the large number of hospitals in Leningrad, it was indicated in 1956 that there were not enough hospital beds and that there was a shortage of several thousand nurses.

Urban areas in the region generally have a large proportion of medical personnel and services than the rural areas. In the city

TABLE XVI

CIVILIAN MEDICAL FACILITIES IN LENINGRAD ECONOMIC-ADMINISTRATIVE REGION: 1956

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		Doctors	Middle M	edical Personnel	Hospital Beds Per 1,000		
	Number	Per 1,000 Total Population	Number	Per 100 Total Population	Number	Total Population	
USSR	310,175	1.5	800,000	4.0	1,288,890	6.4	
RSFSR	183,401	1.6	578,900	5.1	761,632	6.7	
Leningrad Economic Region	19,451	3.2	45,125	7•5	51,871	8.6	
Leningrad City	15,532	4.9	29,000	9.1	34,298	10.8	
Leningradskaya Oblast	2,121	1.8	7,100	6 . 1	8,773	7•5	
Urban Rural	2,007 375	3•5 0•6	5,368 2,032	9•5 3•4	7,239 1,950	12.8 3.4	
Novgorodskaya Oblast	765	1.1	3,900	5•4	4,753	6.5	
Pskovskaya Oblastl	1,033	1.0	5 ,12 5	5.1	4,047	4.1	

1/ Estimated.

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of Leningrad in 1956, there was one doctor for 204 persons, and in the urban areas of Leningradskaya Oblast the incidence was one doctor for about 280 persons. For the rural population of Leningradskaya Oblast the ratio is one doctor for 1,597 persons. An urban-rural distribution of doctors in Novgorodskaya and Pskovskaya Oblasts is not available, but the ratio of doctors to total population is one doctor for 938 persons in Novgorodskaya Oblast and one doctor for 963 persons in Pskovskaya Oblast. Secondary medical personnel follow the same pattern as doctors, the majority of these personnel being located in urban areas. In 1956, in Leningradskaya Oblast, 73 per cent of the secondary medical personnel were in the urban areas.

The over-all medical facilities of Leningradskaya Oblast are generally more prevalent than those in Novgorodskaya or Pskovskaya Oblasts. In 1956, Leningradskaya Oblast had 162 hospitals, 89 of which were located in rural areas. At the same time the oblast had 25 sanitaria and 25 rest homes with 8,812 beds. The number of polyclinics totaled 210, 125 of them in rural areas; the number of dispensaries run by medical assistants totaled 563, of which 520 were in rural areas. A training school for medical aides and midwives is located in Luga, and a nursing school in Lomonosov.

Infant mortality in the rural areas of Leningradskaya

Oblast is significantly higher than it is in the USSR as a whole - 82.7

per 1,000, as compared with 64.5 per 1,000. This indicates that rural

medical care and facilities are not adequate. The government has

called for measures to improve health education among the population

and to ensure early hospitalization of the ill.

Medical facilities are less extensive in Novgorodskaya and Pskovskaya Oblasts (see Table XVI). A 1957 report indicates that Velikiye Luki, in Pskovskaya Oblast, has a shortage of doctors, with the result that secondary medical personnel are being called upon to render emergency medical aid.

A school for the training of medical assistants and midwives

is located in Borovichi (Novgorodskaya Oblast), and in Pechory and Nevel (Pskovskaya Oblast). There is a nursing school in Valday (Novgorodskaya Oblast).

No information is available concerning the quantity of medical supplies and equipment in the region. Readily available penicillin and a blood transfusion center for the city of Leningrad are reported. Production of pharmaceuticals and possibly penicillin in Leningrad is controlled by a chief directorate of the USSR and RSFSR Ministry of Public Health. The Departments of Health, attached to the local executive committees in the administrative divisions of the region exercise limited operational control over hospitals and polyclinics and are responsible for the enforcement of local health measures and sanitary regulations. In addition to the medical facilities and care administered by agencies of the RSFSR Ministry of Health, such ministries as Defense, Interior, Transportation, and several economic ministries, have some public health functions.

D. Educational and Cultural Facilities

Leningrad is the educational and cultural center of the Leningrad Economic-Administrative Region. With 41 institutions of higher education, 187 scientific institutions, and numerous experimental laboratories, Leningrad is second only to Moskva as a training, research, and cultural center in the USSR. The best known institution in the city is the Leningrad State University im. Zhdanov (Target 0153-0234), which had in 1956-1957 eleven thousand students in its 13 faculties or departments, 3,500 correspondence students, and several hundred students in the evening division. The other 40 institutions are specialized schools which train students in various fields, such as electrical engineering, medicine, pedagogy, forestry, optics, and music. The largest of these institutions are shown in Table XVII.

The 41 institutions of higher education in Leningrad City in 1956-1957, had a total enrollment of 155,200 (of whom 81,300 were women); 121,000 were in residence, the rest were correspondence

TABLE XVII

MAJOR INSTITUTIONS OF HIGHER EDUCATION IN LENINGRAD (Beginning of academic year 1956-1957)

Name of Institution	No. of Students
W T Volimin	11.209
Polytechnical Institute im. M. I. Kalinin	10,856
Leningrad State University im. A. A. Zhdanov	
Leningrad Institute of Railway Engineering im.	6,798
Academician V. N. Obraztsov	5,815
Institute of Electrical Engineering im. V. I. Lenin	4,881
State Pedagogical Institute im. A. I. Hertsen	4.656
Institute of Shipbuilding	4,627
Leningrad Forestry Academy im. S. M. Alrov	4,404
Teminomad Mining Institute	4,392
Terimenad Technological Institute ime Lensoviet	4,197
Teningrad Institute of Constructional Mighiesing	
Tartitute of Drecision Mechanics and Upulus	3,727
First Medical Institute im. Academician I. I. Pavlov	3,725
Textile Institute im. S. M. Kirov	3,171
I oningrad Agricultural Institute	3,092
Leningrad Medical Institute of Pedriatrics	2,579
Tarkituta fam Rilm Rogineers	1,085
State Institute of Physical Culture im. P. F. Lesgar	982
Leningrad State Conservatoire	/
State Drama Institute	311
DORGE DISHE THOUSENED	

secondary schools with 79,300 students (including 42,700 women); 67,100 in residence, the others correspondence students. During the Fifth Five-Year Plan period, 1951-1955, 135,500 students were graduated from Leningrad's higher institutions of learning and secondary specialized schools, an increase of 52,100 over the number graduated during the Fourth Five-Year Plan. More than 50 per cent of the students were preparing for work in industry and construction (see Table XVIII).

Since 1956 there has been a policy to reduce the number of admissions to higher education establishments in Leningrad, because more specialists are being trained in these schools than can be absorbed in the Leningrad Economic-Administrative Region, and because the policy of shifting large numbers of young specialists from one region to another is no longer considered desirable. Thus, in 1956, the number of students in advanced institutions of learning was

Another new trend is one that gives priority in admitting students to higher education establishments to persons who have had work experience. In the 1957-1958 academic year, 40 per cent of the enrollment at Leningrad State University consisted of students with work experience.

TABLE XVIII

DISTRIBUTION OF INSTITUTIONS AND STUDENTS BY BRANCH OF NATIONAL ECONOMY IN CITY OF LENINGRAD (Beginning of academic year 1956-1957)

	Higher Insti	tutions	Tekhnikums and o ary Specialized	<u>Institutions</u>
Branch of	No. of	No. of	No. of	No. of
National Economy	Institutions	Students	<u>Institutions</u>	Students
1100202				
Industry and		(3 goo	42	43,000
Construction	15	61,700	4~	40,000
Transport and	,	15,700	8	8,200
Communications	6	4,600	5	3,300
Economics and Law	2	19,500	9	2,900
<u>Enlig</u> htenment	5 5	3,200	6	1,700
Art	2 6	12,200	19	7,400
Public Health	•	4.100	i	600
Agriculture	_2			
Total	41	121,000	90	67,100

of the 187 scientific-research institutes in Leningrad, several are branches of the Academy of Sciences of the USSR. These branches conduct significant theoretical and practical research for government, military, and economic agencies. Among the most important are the Leningrad Physico-Technical Institute (Target 0103-0158), a major physical and nuclear research center, and the Leningrad Radium Institute (Target 0153-0230), which conducts research in natural and artificial radioactivity and cosmic radiation. Leningrad is also an important center for research on the arctic, mathematics, applied chemistry, missiles, theoretical astronomy, physiology, geology, oceanography, history, and language. The main astronomical observatory of the USSR Academy of Sciences is located in Pulkovo, near Leningrad.

The Leningrad Evening University of Marxism-Leninism, under the direction of the Leningrad City Executive Committee of the Communist Party, had 8,100 students, both Party and nonparty, enrolled in 1956-1957. Leningrad has numerous military schools (see Military, Section B. 2.)

Outside the city of Leningrad in 1956, in addition to the Leningrad Agriculture Institute at Pushkin, a suburb of Leningrad, there were only 4 institutions of higher education, all of them pedagogical institutes. These institutes are at Vyborg (Leningradskaya Oblast), Antonovo Village (Novgorodskaya Oblast), and Pskov and Velikiye Luki (Pskovskaya Oblast). Their total enrollment was 5,575 in 1956 (see Table XIX). The number of specialized secondary schools and tekhnikums outside the city of Leningrad is not known. The number of students receiving training in specialized schools for occupations as medical aides and midwives, veterinarian technologists, elementary school teachers, agricultural, construction, transport, and industrial workers totaled 14,075 in 1956 (see Table XIX).

TABLE XIX

NUMBER OF STUDENTS (INCLUDING CORRESPONDENCE STUDENTS)
IN HIGHER EDUCATION INSTITUTIONS AND SECONDARY
SPECIALIZED SCHOOLS OUTSIDE CITY OF
LENINGRAD: 1956

Division	No. of Students in Higher Education Institutions	No. of Students In Secondary Specialized Schools and Tekhnikums
Leningradskaya Oblast	500	5,500
Novgorodskaya Oblast	1,600	3 , 700
Pskovskaya Oblast	<u>3.475</u>	4.875
Total	5,575	14,075
<u>l</u> / Estima	ted.	

In 1955-1956 the Economic Region had 5,104 general education schools (see Table XX) and 44 schools for handicapped children. Classes

are small, ranging from an average of 21 students per teacher in the city of Leningrad to 14 students per teacher in Pskovskaya Oblast.

TABLE XX

DISTRIBUTION OF GENERAL EDUCATION SCHOOLS
AND STUDENTS: 1955-1956

Division	Primary, Seven-Year, and Ten-Year Schools	No. of Students	Average No. of Students Per School
City of Leningrad	437	364 , 589	834
Leningradskaya Oblast Novgorodskaya Oblast Pskovskaya Oblast	1,386	141,047	176
	1,327	88,749	67
	<u>1,954</u>	126,292	<u>65</u>
Total	5,104	720,677	141
1/ Estima	ted.		

The number of pupils in grades 8-10 has increased in all oblasts of the region, whereas the number of students in grades 1-4, with the exception of the city of Leningrad, and in grades 5-7, has decreased since 1950-1951. The number of students in grades 8-10 will probably continue to increase, since the present 7-year compulsory education is supposed to be extended to 10 years in all areas of the region by 1960.

In addition to the general elementary and secondary schools in the region, there are special general education schools for urban and rural working youths and for adults. These schools have substantial enrollments: 79,100 in the city of Leningrad, 13,900 in Leningradskaya Oblast, 6,100 in Novgorodskaya Oblast, and 7,575 in Pskovskaya Oblast.

In the fall of 1956 an unknown number of boarding schools for grades 1-7 were established in the Economic Region; 7, however, are known to have been established in the area of Leningrad City. Enrollment the following year in the Economic Region was about 2,000. The children stay at the school the year around and are subjected to

complete Communist indoctrination away from any family influence. These schools are primarily trade schools, with the students getting practical experience in agricultural or industrial work. Reports indicate that in the RSFSR the number of boarding schools and students was to be increased in 1958, the latter by 50 per cent. This type of school, a pet project of Khrushchev, has been acclaimed as the model for educating children and training them to be leaders in Communist society with practical experience. Those suited for it will go on to college to complete their education. The quality of educational facilities and instruction in general is unknown; there are reports of some deficiencies. In the city of Leningrad, rayon (ward) executive committees have been criticized for poor management of schools; shortages of school equipment have also been reported. A 1957 report claims that many graduates of secondary schools displayed inadequate knowledge on examinations for admission to higher educational institutions. In March 1958 it was reported that 4,300 students in Leningrad's institutions of higher learning had been expelled for failing to meet academic standards. In general, however, taking into consideration the low average number of students per teacher and the low average number of students per school, educational opportunities in the Economic-Administrative Region appear to be on a par with the USSR average. Within the Economic Region, the city of Leningrad has the best educational opportunities and probably the best trained instructors.

Leningrad has a wealth of cultural facilities, including numerous theaters, museums, and libraries. There are 13 major theaters and many museums of world renown within the city; there are also 619 "mass" libraries, 90 of which are state libraries, and over 1,600 libraries in factories, higher education establishments, and other institutions. The Library of the Academy of Sciences of the USSR, under the supervision of the Presidum of the Academy of Sciences of the USSR, in Moskva, is located in Leningrad. The collection reportedly contains 7,500,000 volumes dealing particularly with the natural

sciences and encompassing complete files of Academy publications issued since its foundation. The Saltykov-Shchedrin State Public Library, one of the largest libraries in the USSR, is reputed to possess a collection of over 12,000,000 volumes, probably representing the broadest coverage of Russian publications since the beginning of printing.

Leningrad is also a major publishing center. In 1953 there were 34 publishing houses, most of them State Publishing Houses or branches of the USSR Academy of Sciences. In 1956, 2,209 books were published in editions totalling 24,000,000 copies, and 27 journals were issued in editions totalling 3,500,000 copies. In 1956 there were 150 printing establishments in Leningrad, the most important being Pechatnyy Dvor (Publishing House), which is reported to issue daily more than half a million copies of books and brochures.

About 150 newspapers are reported to be published in Leningrad. Presumably this figure includes single-sheet wall newspapers published by factories, educational establishments, and other institutions. In addition to rayon newspapers in Leningradskaya Oblast there are 3 oblast newspapers: Leningradskaya Pravda; the Komsomol paper, Smena; and the Pioneer paper, Leninskiye Iskry. Their circulation is unknown. Major city papers are Vecherniy Leningrad, and Stroitelnyy Rabochiy.

Table XXI presents the number of libraries, clubs, theaters, motion picture projectors, and museums, by oblast, in the Economic Region. Cultural facilities in Novgorodskaya Oblast include an oblast theater of drama, a philharmonic society, an art museum in the city of Novgorod, in addition to numerous libraries, clubs, and houses of culture. Novgorodskaya Pravda, the oblast newspaper, has a circulation of 55,000; each rayon also publishes a newspaper.

Pskovskaya Oblast has an oblast theater of drama, an oblast museum of popular art in Pskov, and numerous houses of culture, clubs, and several film theaters. Pskovskaya Pravda, the oblast newspaper,

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has a circulation of 50,000; each rayon also publishes a newspaper.

TABLE XXI

CULTURAL FACILITIES IN THE LENINGRAD ECONOMICADMINISTRATIVE REGION: 1956

Divisions	Mass <u>Libraries</u>	Books (in thousands)	Clubs	Theaters	Motion Picture Projectors	Museums
City of Leningrad	619	11,317	117	13	205	49
Leningradskaya Oblast	981	3,744	693	3	728	3
Novgorodskaya Oblast	778	3,294	694	1	405	5
Pskovskaya Oblast	1,015	4,083	1,158	1	535	6
1/ Estim	ated.					

E. Communications

The telecommunications system in the Leningrad Economic-Administrative Region is designed to serve state and military needs rather than the general public. It is probably adequate in meeting the needs for which it is designed. Radio and wire communications are fully integrated in one complete telecommunications system. Wire lines usually follow the main rail and road routes.

Leningrad is the most important communications center in NW European USSR as well as a great center of the telecommunications industry. Leningrad has long distance telephone and telegraph connections with foreign cities, oblast and rayon centers, and other USSR cities. The Leningrad-Moskva overhead line was converted to a 12 channel system in 1955. There is an underground coaxial cable to Moskva and there are cables to Helsinki (190 statute miles W), Kronshtadt (19.5 statute miles W), Lomonosov (31 statute miles), Lisiy Nos (19 statute miles) and Liyepaya (413.5 statute miles SW in Latviskaya SSR). There is a dial telephone network in the city of Leningrad, serving approximately 70,000 subscribers, and public facilities for local and long distance service. Private telephones within the city

are reported to be quite numerous, although, in many instances, they are used by several parties. In 1956, 6.4 million telegrams were sent and 7.9 million local telephone calls were made.

In Leningradskaya Oblast, all selsovets and machine tractor stations have telephone connections with their rayon centers. In Novgorodskaya and Pskovskaya Oblasts, all machine tractor stations have telephone connections with their rayon centers, but it is not known how many selsovets are connected by telephone with their rayon centers. Probably about 70 per cent of the collective farms in the Economic-Administrative Region have telephone communications with their district centers, and over 90 per cent of the state farms have telephone communications with their district centers. Under the radial system of communications, which was in existence in 1957, oblast centers usually do not have direct communications with each other except via an important zonal center, such as Leningrad. This situation also prevails on the rayon level with the rayon centers linked only through oblast centers.

In the rural areas of the Economic-Administrative Region telephone and telegraph service is probably minimal. In July 1957 it was reported that more than 200,000 populated centers in the rural districts of the USSR did not have a single telephone. It was further reported that thousands of schools, hospitals, trade, and industrial establishments had no telephone communications with their district centers.

In addition to the paucity of telephone communications in some areas, it has also been reported that much of the telephone network is outmoded, most lines still using a manual system of switching. Furthermore, most of the telephone exchanges operate only part time. In 1957, it was stated that only 64 per cent of the oblast, kray, and republic centers had 24 hour-a-day telephone communications with Moskva, and only a little more than half of the rayon centers had 24 hour-a-day telephone communications with oblast centers.

Radio communication is considered the cheapest and most reliable form of communication in the USSR, suffering only from one defectits lack of security. There are 2 known radio broadcasting stations and 2 television stations in the city of Leningrad. Other radio stations are known to exist in the most important cities of the Economic Region, on military installations, airfields, and machine tractor stations. A relatively small percentage of the population of the Economic Region has radio receivers. In the administrative area of Leningrad in 1956, for example, there were 162,900 radio receivers. The more common method of reception is the wall loudspeaker (radio tochka), which is connected directly into a central circuit system. In 1956, there were 910,000 of these in the Leningrad metropolitan area. The number of television sets in 1957 was reported to be 253,000. For Leningradskaya Oblast, exclusive of Leningrad and its suburbs, a total of 86,700 radio receivers and televisions sets and 140,100 wall loudspeakers was reported for 1956. The number of radio receivers and television sets in Novgorodskaya and Pskovskaya Oblasts is not known. It is probable that most households in the urban areas have a wall loudspeaker, since the cost is very low.

In 1955 it was reported that a communications system in the rural areas had been established on the basis of an intra-oblast radio network. The heart of this system is the radio receiving and sending set, the "Urozhay-l." With this system, the Oblast Directorates of Agriculture maintain dispatcher radio communications with MTS's and their tractor brigades in the field. A particularly useful feature of this system is that it can readily be connected with the regular telephone communications system.

Virtually all civil telephone, telegraph, and radio communication facilities are controlled by the RSFSR Ministry of Communications through the Oblast Directorates of Communications. Direct control over the operating management of the main telegraph, telephone, and radio networks, having an All-Union significance, is exercised by

the USSR Ministry of Communications. MVD units are responsible for security of all telecommunications facilities, except military.

Various industrial ministries have communication lines between cities within the Economic Region. These lines consitute an independent communications system and do not come within the jurisdiction of the Ministry of Communications. It has been proposed that these lines be transferred to the jurisdiction of the Ministry of Communications and that in the future all communications be planned by the Ministry of Communications in agreement with Gosplan and the enterprises concerned.

Recent reports indicate that the existing scheme of communications within the Economic Region may be changed in order to satisfy the requirements of the <u>Sovnarkhoz</u>. It has been stated that the cumbersome radial system of communications should be abandoned in favor of a point-to-point system. This, of course, would call for a substantial increase in the number of cable and radio relay lines.

IV. Socio-Economic Factors

A. Housing

All of the administrative areas of the Leningrad EconomicAdministrative Region suffer a shortage of housing, both urban and rural.

This is due to the diversion of construction materials into channels other than housing construction, to the growth of urban population at a rate faster than the growth of housing accommodations, and to the severe loss and/or damage to housing during World War II.

In Leningradskaya Oblast more than 2,000 villages and settlements and more than 1,000,000 kolkhoz homes and structures were destroyed. This destruction resulted in the loss of about 1,500,000 sq. meters (16,125,000 sq. ft.) of housing and more than 1,000,000 sq. meters (10,750,000 sq. ft.) rendered uninhabitable. In the city of Leningrad about 5 million sq. meters (53,750,000 sq. ft.) of housing was destroyed, resulting in the loss of housing space for about 700,000 persons. Novegorodskaya and Pskovskaya Oblasts also received extensive damage. Most of the cities and towns in these 2 oblasts were damaged; many were completely destroyed.

Reconstruction and restoration of destroyed and damaged housing began immediately after the war. In Leningrad the total housing by 1951 was 22,833,000 sq. meters (245,454,750 sq. ft.) compared to 25,700,000 sq. meters (276,275,000 sq. ft.) in 1941. By the end of 1956 the total housing in the city was 25,300,000 sq. meters (271,975,000 sq. ft.), very close to the prewar level. However, per capita floor space in the city of Leningrad in 1956 was higher than the per capita floor space in 1939. This increase in floor space per person is the result of a decrease in the population between 1939 and 1956.

Per capita floor space in Leningrad is above the 1956 USSR urban average of 7.4 sq. meters (79.55 sq. ft.) but is still below the RSFSR legal norm of 12 sq. meters (129 sq. ft.). Nevertheless, criticism of the housing situation in Leningrad still continues. Much of the criticism concerns the state of disrepair of many buildings, and the

quality of repair work due to the poor quality of building materials. Other criticisms center around the slow construction of housing due to slow planning and processing of technical data and working blueprints by the planning organizations. In 1957, 520,000 sq. meters (5,590,000 sq. ft.) of housing were to be built in Leningrad, but as of October 1, 1957, only 158,000 sq. meters (1,698,500 sq. ft.) had been built.

The other cities in Leningradskaya Oblast for which floor space is available are shown in Table XXII. In general, the per capita floor space in these cities is less than in Leningrad. Sestroretsk has a larger per capita floor space, probably because the city is a large health resort and therefore has a larger housing fund which in this table has been divided among a smaller, permanent population.

TABLE XXII

HOUSING SPACE IN SELECTED CITIES IN
LENINGRADSKAYA OBLAST: 1956

City	Estimated Population	Total Floor Space	Housing Sq. Meters	Space Sq. Feet
Leningrad	2,814,0001/	25,300,000	9.0	96.65
Kolpino	48,000	479,000	10.0	107.28
Pavlovsk	28,000	102,000	3.6	39.16
Petrodvorets	40,000	257,000	6.4	69.06
Pushkin	58,000	338,000	5.8	62.65
Sestroretsk	34,000	532,000	15.6	168,20

^{1/} Reported population 1956. The rest of the populations are estimated for 1 January 1959.

In the postwar period in the city of Novgored, 200,000 sq. meters (2,150,000 sq. ft.) of housing has been restored or rebuilt. The Soviets report that this is extremely inadequate and that per capita floor space in the city is only 96 per cent of prewar level.

In Pskovskaya Oblast restoration was reported to have been basically completed during the Fourth Five-Year Plank (1946-50). It has been reported that more than 96,000 sq. meters (1,032,000 sq. ft.) of housing in cities and rayon centers and about 32,000 houses for kolkhozniks were rebuilt or reconstructed.

Over 40 per cent of the region is covered with coniferous and mixed forests. The region, though, does not have an overabundance of building materials other than lumber. Clay, quartz sand, quartz, limestone, dolomite, gypsum, and other building materials are found in the region; but not in large quantity. Enterprises of the building materials industry exist in all 3 administrative areas of the region.

tion of the Leningrad City Executive Committee, supervises the direction of trusts concerned with housing and communal construction in the city. In the 3 oblasts, the Chief of the Oblast Department of Construction and Architectural Affairs and the Chief of the Oblast Directorate for Kolkhoz Construction supervise nonindustrial urban and rural construction, respectively. Most of the industrial construction in the Economic-Administrative Region is supervised by the Branch Construction Administration under the Sovnarkhoz. Coordination among these construction organizations is realized by RSFSR Gosplan.

B. Food Supplies

The primary purpose of agricultural activity in the Leningrad Economic-Administrative Region, according to a 1956 Soviet report, is to supply the city of Leningrad with vegetables, potatoes, milk, meat, and cheese for its light and food industries, and, in turn, for its population. Large quantities of potatoes, vegetables, meat, fruit, and dairy products must be brought into the city from Latviyskaya, Estonskaya, and Belorusskaya Republics, as well as from the 3 oblasts comprising the Economic Region.

Although the Economic Region is primarily an agricultural area, an estimated 61.5 per cent of the region's population (excluding the city of Leningrad) residing in rural areas, the production of food crops is limited by extensive forested and swampy areas and by poor soils. Small areas are sown to wheat, although the soil and weather do not favor it. Fodder grasses and flax predominate in Pskovskaya and Novgorodskaya Oblasts. The raising of dairy cattle in the region is favored by the abundance of meadowland.

Intensive agricultural activities aimed at supplying the city of Leningrad occupy a zone 31 to 37 miles S and SW of the city. Potatoes and vegetables are the chief crops; dairying, and the raising of pigs and poultry are important. Hot house agriculture is quite prevalent in this area, providing the city with early potatoes and vegetables. S and SW of this suburban zone the area is predominantly agricultural and serves as an additional supplier of vegetables, potatoes, and milk. Further S, in the NE part of Pskovskaya Oblast, there is a large area devoted to dairying, pig raising, and vegetable-potato cultivation. Pskovskaya Oblast has a surplus of grain and potatoes and these foods are shipped to other areas within the region, particularly to the city of Leningrad. Novgorodskaya Oblast is selfsufficient in dairy and meat products, vegetables, and potatoes. Some of these food products are shipped to Leningrad and other industrial centers within the region. The oblast, though, is not selfsufficient in bread. Grain must be brought into the oblast from Pskovskaya Oblast or from outside the region.

Since the Economic Region has an extensive coverage of rivers and lakes, and also borders the Gulf of Finland, fish are an important staple in the diet of the population. Game presumably is important also, since forests cover about 40 per cent of the region.

The distribution of food within the Economic-Administrative Region, beset by such difficulties as poor roads and adverse climatic conditions, is facilitated by the fact that the great bulk of the population, except for the city of Leningrad, has local sources of food. Being a predominantly rural population, most of the households, both in the country and in the suburban areas, have their own gardens. This is indicated by the fact that in Novgorodskaya Oblast, approximately one-third of the vegetable and half of the potato crop grown in 1956 was on private plots. In Pskovskaya Oblast about 40 per cent of the potatoes and 50 per cent of the vegetables are grown in private gardens. In Leningradskaya Oblast the ratio was 40 per cent of the potatoes and about 11 per cent of the vegetables. In Leningradskaya and Pskovskaya Oblasts over 50 per cent of the cows were on private plots and in Novgorodskaya Oblast, in 1956, almost twice as many swine were raised privately as were raised on state or collective farms.

Available data indicate that in terms of food supplies

Leningrad is substantially better off than most other USSR cities as
a result of all the intensive cultivation in the area surrounding it;
it ranks 6th in total per capita food expenditures, and 7th in total
per capita expenditures for food and nonfood items.

Total food supplies in reserve at the end of 1955 would have sufficed for only 15 days of normal turnover in Leningrad City, 36 days in Leningradskaya Oblast, 34 days in Novgorodskaya Oblast, and 27 days in Pskovskaya Oblast.

C. Transportation

1. General

Leningrad, located on the Gulf of Finland at the delta of the Neva River, has direct access to the Baltic Sea and the Atlantic Ocean. The Baltic-White Sea Canal and the Volga-Baltic Waterway (formerly the Mariinsk Waterway) provides inland connections with the White Sea (500 nautical miles to the NE), with Moskva, the

Volga Basin, and the Caspian and Black Seas. As the rail center of NW Russia the city has extensive facilities for receiving, storing, and forwarding freight to the port of Murmansk, to the Baltic Republics, and to inland cities. The highway network is not extensive and is used mainly for local traffic. Leningrad is second only to Moskva as an air transport center and point of international entry.

2. Railroads

Region, particularly in Leningradskaya Oblast, is one of the best developed in the USSR. The network is of great importance in transporting raw materials and fuel to the industrial complex centered around the city of Leningrad. Ninety per cent of the fuel and 70 per cent of the raw materials used by the industrial enterprises in the Leningrad industrial complex must be brought into the Economic Region from other areas of the USSR. In 1955, 85 per cent of the incoming freight and 92 per cent of the outgoing freight of Leningrad City and Oblast was transported by railroads. The remainder was transported by waterways (see Table XXIII). Highway trucking is relatively unimportant.

Ieningrad, with 5 large passenger stations and 6 freight stations, has rail lines connecting the city with Moskva, the Urals, the Ukraine, the Baltic countries, Poland, Finland, and northern USSR. A dense network of 12 rail lines radiates from the city (refer to Map IV): to the N, lines extend to Finland, the Karelskaya ASSR, and to Murmansk; to the E, lines run to the Urals and the Far East via Cherepovets and Vologda and to Moskva via Ovinishche; to the S, lines run to Moskva, Novgorod, and Kiev; to the W, lines run to Ust Luga on the Gulf of Finland, to Tallin, Riga, and Warsaw. Only 3 main rail-roads in the Economic Region do not enter Leningrad. They are the Bologoye-Pskov-Riga line, the Moskva-Velikiye Luki-Riga line, and the Bologoye-Velikiye Luki-Warsaw line. All rail lines entering the city, their terminals, and the port facilities are connected by a semicircular belt line.

Volga Basin, and the Caspian and Black Seas. As the rail center of NW Russia the city has extensive facilities for receiving, storing, and forwarding freight to the port of Murmansk, to the Baltic Republics, and to inland cities. The highway network is not extensive and is used mainly for local traffic. Leningrad is second only to Moskva as an air transport center and point of international entry.

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TABLE XXIII

VOLUME OF INCOMING AND OUTGOING FREIGHT ON RAILROADS AND WATERWAYS IN THE LENINGRAD ECONOMIC-ADMINISTRATIVE REGION: 1955

(thousands of tons)

	Railroads		Waterways	
	Incoming	Outgoing	Incoming	Outgoing
Leningradskaya Oblast	38,380	21,045	6,759	4,746
Novgorodskaya Oblast	4,226	5 , 335	777	1,259
Pskovskaya Oblast1/	3,160	2,960	35	35

^{1/} Estimated.

The most important rail line in the region, in terms of passenger and freight loads, is the 404-mile, double-track Leningrad-Moskva line running S-E out of Leningrad via Chudovo (refer to Map IV). This line is scheduled to be electrified under the new Seven-Year Plan with work to begin on the Moskva-Kalinin section. The Leningrad-Malaya Vishera section is scheduled to be electrified by 1960. A second connection between Leningrad and the capital is through Ovinishche (Kalininskaya Oblast) via the single-track Leningrad-Pestovo railroad.

Leningrad is connected with the Urals by a rail line which runs SE out of Leningrad via Tikhvin and Podborovye. This line is very important for transporting metal products from the Cherepovets region and coal from the Pechora Basin to Leningrad.

The double-track Leningrad-Tallin line, running SW from Leningrad via Gatchina and Ivan-Gorod, connects the city with the Baltic area. This line is of particular importance in the winter months since Tallin (Estonskaya SSR) serves as an alternate port for Leningrad when the latter's harbor is frozen. Leningrad is also connected with the Baltic area by branch lines of the double-track Leningrad-Pskov trunk line. This trunk line also connects Leningrad

with Warsaw via Pytalovo (Abrene) and Vilnyus (Litovskaya SSR).

The Leningrad-Dno-Vitebsk (Vitebskaya Oblast, Belorusskaya SSR) rail line, running N-S through the Economic Region has connections extending to the Ukraine. Major shipments on this line include grain from, and manufactured goods and timber to, the Ukraine.

There are several rail lines running N and N-W from Leningrad which are economically significant. The Leningrad-Murmansk rail line, running SE and E along the S side of Lake Ladoga, then N via Lodeynoye Pole to Petrozavodsk and Murmansk is important because Murmansk also serves as an alternate port during the winter months when Leningrad's port is frozen. Imports from Murmansk, ore from the Kola Peninsula, and timber from the Karelskaya ASSR reach Leningrad on this line.

Important rail lines running N-W from Leningrad are the Leningrad-Vyborg line, with connections to Helsinki, Finland, and the Leningrad-Khiitola railroad which provides a connection between Leningrad and the Karelskaya ASSR and an alternate rail route to Murmansk. Within the Economic Region there are branch lines which are used primarily for transporting freight, particularly food products, within the region. They also serve as connecting links between the main lines.

Few of the rail lines in the region are electrified; those that are electrified are found only in the immediate vicinity of Leningrad (refer to Map·IV). Electrification of railroads has lagged behind plans. The largest and most important rail junctions in the Economic Region are Leningrad, Vyborg, Volkhov, Pskov, Dno, and Velikiye Luki. Other important junctions are Gatchina, Mga, Novgorod, Nevel, and Novosokolniki.

The densest rail network in the Economic Region lies within Leningradskaya Oblast, which has 56 per cent of the rail line mileage. Novogordskaya Oblast has 23 per cent and Pskovskaya Oblast 21 per cent. There has been very little new rail line construction in the region since 1917, primarily because the area already had an extensive network, but also because of the need to reconstruct the lines that

were destroyed during World War II. The only major railway constructed in the Economic Region by the Soviet government is the 229-mile Leningrad-Pestovo line, which roughly parallels the Leningrad-Moskva line within the region. The fact that total rail mileage was less in 1956 than it was in 1941 indicates that some of the rail lines destroyed during the war were not restored. Also there apparently was consolidation of some lines and obsolescence of others. Rail mileage in Pskov-skaya Oblast in 1956 comprises only 82 per cent of the mileage in that oblast in 1941. Rail mileage in all 3 oblasts comprising the Economic Region has declined slightly since 1951 (see Table XXIV).

TABLE XXIV

RAILROAD MILEAGE WITHIN THE LENINGRAD ECONOMIC REGION: 1941-1956

Division	1941	1946	1951	1956
Leningradskaya Oblast	1 ,7 55	1,811	1,772	1,722
Novgorodskaya Oblast	729	721	719	712
Pskovskaya Oblast1/	770	580	<u>640</u>	630
Total	3,254	3,112	3,131	3,064

^{1/} Estimated.

Included in the Sixth Five-Year Plan (1956-60) were plans for the construction of 2 new rail lines in the Economic Region. One is to run from Sosnovo, N of Leningrad, through Leningradskaya Oblast to Michurinsk (Tambovskaya Oblast). The second is to run from Novgorod S-E to Kresttsy, thereby linking Novgorod with the E-W Pskov-Bologoye rail line at Valday. Most of the plans, however, concern only the improvement and modernization of existing lines. New types of rails which would permit an increase in the weight of passenger and freight traffic and higher speeds, are planned for existing lines. Steam engines are to be replaced by diesel locomotives. The entire

Leningrad-Moskva rail line is to be equipped with an automatic blocking system. Electrification of rail lines has also been included in the plans. Since the Sixth Five-Year Plan has been abolished and a long-range Seven-Year Plan has been decreed it is not known when the above plans will be implemented.

Railroads within the Leningrad Economic-Administrative Region come under the jurisdiction of 4 railroad systems operating in the region. The Directorate, October Railroad System, in Leningrad controls the movement of all freight and passenger traffic and troop convoys over the major portion of the rail lines with the Economic Region. The Directorate operates the railroad system through subordinate division headquarters: 5 of these are located in Leningrad and control traffic to Finland, Moskva, Tallin, Vitebsk, and Warsaw; other division headquarters are at Dno, Pskov, and Vyborg. Within the Economic Region the jurisdiction of the October Railroad System extends from Khiitola and Vyborg in Leningradskaya Oblast E to Volkhov and Borovichi, S to Pytalovo and Sushchevo in Pskovskaya Oblast, and W to Ivan-Gorod. The Kirov Railroad System, headquarters in Kirov (Kirovskaya Oblast) adjoins the October Railroad System at Volkhov, Posadnikovo, Chudovo, and Nebolchi (refer to Map IV). Volkhov, a major railroad junction, is a division headquarters of the Kirov Railroad System. The Kalinin Railroad System, headquarters in Kalinin (Kalininskaya Oblast) has jurisdiction over rail lines in the S part of Pskovskaya Oblast. It adjoins the October Railroad System at Sushchevo. Velikiye Luki is a division headquarters of this system. The Latvian Railroad System, headquarters in Tallin, enters the Economic Region at Pyatalovo (Abrene).

3. Shipping and Water Transport

The Economic-Administrative Region has several seaports, including the principal ports of Leningrad and Vyborg, and the secondary ports of Vysotsk, Primorsk, and Lomonosov. Leningrad, the USSR's principal port, is located at the delta of the navigable

Neva River, at the E end of the Gulf of Finland. Seagoing shipping enters the Gulf from the Baltic Sea and reaches Leningrad from Kronshtadt via a constantly dredged channel. Leningrad port is estimated to have a capacity of 19,000 short tons per 20-hour day and with improvement of existing facilities it could handle 45,000 short tons. Icebreakers are used to keep the port open as long as possible. The harbor is closed about 15 weeks each year, from approximately the third week of January until the first week in May. Bulk freight, wood and coal, constitute the largest proportion of imports; coal from Poland was an important import in 1956. The port has good loading and storage facilities. There are extensive rail transshipment facilities throughout the main harbor area on moles between the basins. In 1956 the port was reported to be able to handle up to 3,000 railroad car loadings and unloadings per day.

In addition to the main port and docking area there are innumerable river port facilities (boat yards, small piers, jetties and docks, boat landings, and basins) scattered along the Neva River and its delta distributaries.

A recent report indicates that work has been completed on the first stage of the Leningrad fishing port, near Avtovo. Structures for the repair of fishing equipment and the preservation of fish, moorages for anchoring and unloading fishing boats and premises for ancillary operations are being constructed. At the present time the port can accommodate and process as many as 30 seiners at a time. Construction of a cold-storage plant with a capacity of 1,000 tons of fish has begun. When all the work is completed, in 1961 or 1962, the Leningrad fishing port is expected to be one of the USSR's largest specialized ports.

Vyborg, located 70 miles NW of Leningrad, is the second most important port in the region. It is estimated to have a capacity of 11,200 short tons per 20-hour day, with a maximum potential capacity, with existing facilities, of 15,300 tons. Expansion of port facilities is believed to be impracticable due to lack of anchorage and to the difficult access for large vessels through its tortuous 19-mile entrance channel,

which has a limiting depth of 20 ft. Ice interferes with navigation from December to May, but icebreakers are generally able to keep the harbor open.

Vysotsk, Lomonosov, and Primorsk are secondary ports. Icebreakers are able to keep the harbors open at Vysotsk and Primorsk. Lomonosov is icebound for about 3 months a year.

All maritime shipping is controlled by the USSR Ministry of Maritime Fleets. All import-export exhanges with foreign countries are controlled by the USSR Ministry of Foreign Trade. The Regional Office (in Leningrad) of the Chief Directorate of the Northern Sea Route, an agency of the USSR Ministry of Maritime Fleets, controls maritime shipping and port facilities along portions of the Northern Sea Route, from Leningrad probably to Murmansk. The Directorate also controls the Leningrad Arctic Scientific Research Institute, which reportedly has the most complete information available on arctic weather, climate, oceanography, geography, and all fields of arctic activity. It is also engaged in development of northern air routes.

Leningrad has important inland water connections with Murmansk, Arkhangelsk, Moskva, and the Volga traffic network via the Baltic-White Sea Canal and the Volga-Baltic Waterway. The 150-year old Volga-Baltic Waterway and the 25-year old Baltic-White Sea Canal are currently undergoing extensive reconstruction and lengthening. The Volga-Baltic Waterway, which links Leningrad with the White Sea Canal via the Neva River, the Novoladozhskiy Canal and the Svir River, shortens the distance between Leningrad and Arkhangelsk by 2,485 miles. When reconstructed, the military and industrial importance of the waterway will increase significantly, since it will be possible for large ships to pass throughout the system. Used chiefly to transport timber, lumber, grain, oil, and salt, the waterway is open to navigation 6 months of the year, from about May to November.

In addition to the important Neva and Svir Rivers in Leningradskaya Oblast, the Volkhov River, flowing from Lake Ilmen

(Novgorodskaya Oblast) to Lake Ladoga, is navigable along its entire course. Regular passenger service is in operation from Novgorod to Volkhov during the navigation season.

The Oyat and Pasha Rivers, which flow into the Svir, the 160-mile Syas River, which flows through Novgorodskaya and Leningradskaya Oblasts into Lake Ladoga, and the Luga River which flows into the Gulf of Finland (refer to Map IV) are navigable on portions of their courses. These rivers are open to navigation from late April to December. In addition to rivers, Lakes Ladoga and Onega are important water routes for transporting freight.

Important river ports in Leningradskaya Oblast, in addition to Leningrad and Petrokrepost, 25 miles apart at the delta and issuance of the Neva River, are Sviritsa, located at the confluence of the Svir and Pasha Rivers, and Lodeynoye Pole, Podporozhye, and Voznesenye on the Svir River. In 1955 about 11.5 million tons of freight were transported by water in Leningradskaya Oblast. This represents about 20 per cent of the freight carried by railroads within the oblast. Lumber products, construction materials, and oil constitute the bulk of water freight. Passenger boats ply between Leningrad and Novaya Ladoga, Sviritsa, and Petrozavodsk (Karelskaya ASSR), as well as between towns on the Neva River.

Novgorodskaya Oblast has numerous rivers and lakes, many of which are used for transporting passengers and freight within the oblast. In addition to the Volkhov River, the Msta River (275 miles) is an important intraoblast shipping route. This navigable river, linked with the Volkhov by a system of canals, flows WNW toward Novgorod and empties into Lake Ilmen. Lake Ilmen (546 sq. miles) is used extensively for shipping. There is passenger service between Novgorod and Volkhov on the Volkhov River, and between Novgorod and Staraya Russa via the Volkhov River, Lake Ilmen, and the Lovat and Polist Rivers. The Lovat River, which rises SE of Nevel in Pskovskaya Oblast, flows 335 miles to Lake Ilmen. This river is navigable for 40 miles along its lower course in Novgorodskaya Oblast.

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Pskovskaya Oblast is poor in waterways, permitting navigation only in the estuary of the Velikaya River on which Pskov is located, and on Lakes Pskov and Peipus in the western part of the oblast. Gdov, located 65 miles N-W of Pskov on the E shore of Lake Peipus is a port of local significance, constituting with Pskov a terminal trading point.

Control and coordination of traffic on the inland waterways in the Leningrad Economic-Administrative Region is effected by the RSFSR Ministry of River Fleets, which functions through agencies in the 3 oblasts in the Economic Region.

4. Highways and Roads

The highway network in the Economic-Administrative Region is not extensive and is used mainly for local traffic. In general, the highways are not of high quality and suffer from adverse climatic conditions and poor drainage throughout the region, but they are reportedly better, particularly in the Leningrad City area, than most roads in other parts of the USSR.

The best roads in the Economic Region are in the immediate vicinity of Leningrad City, the only area where a network of roads may be said to exist. Numerous hard-surfaced roads connect Leningrad with its suburbs and are important for bringing agricultural products and other freight into the city.

There are 4 primary highways of bituminous or concrete construction radiating out of the city of Leningrad which are of more than local significance. The most important is the Leningrad-Moskva highway, running through Chudovo and Novgorod to Moskva, 434.9 miles SE. Reconstruction and repavement of this highway was completed in early 1958. The Leningrad-Tallin highway (238 miles) is a heavily travelled road, connecting the Economic Region with the Estonskaya SSR. Traffic on it will be greatly expedited when a reinforced concrete bridge over the Narva River is completed. The Leningrad-Vyborg highway, running NW out of Leningrad to the Finnish border, has international military

significance. The Leningrad-Luga-Pskov highway, 179 miles in length, with connections to the Ukraine and the Baltic area, is reported to be hard-surfaced as far as Luga. Not as heavily travelled as the other main highways, this road is important primarily as a means of exchanging foodstuffs, construction materials, and light industrial products among towns along its route. Another highway reported to be hardsurfaced is the EW Velikiye Luki-Sebezh highway. In addition to the primary highways, important secondary roads include the Leningrad-Priozersk-Khiitola, running N to the Karelskaya ASSR; the Chudovo-Novgorod road, the Pskov-Ostrov-Opochka-Nevel road, and the Novgorod-Pskov road (refer to Map IV). There are roads, generally of poor quality, which connect the rayon centers in the region with their respective oblast capitals. Most of the roads in the Economic Region are dirt roads or a combination of crushed rock, gravel, and sand, and the majority of them become almost impassable in wet weather. Snow is also a formidable obstacle to travel since there is reportedly little mechanized snow removal equipment in the region.

The city of Leningrad has bus connections with its suburbs, and in 1954 regular bus transportation was inaugurated on the Leningrad-Tallin, Leningrad-Pskov, and Leningrad-Vyborg highways. Daily bus service between Leningrad and Moskva was initiated in February 1958. It was also reported in 1954 that regular bus service was established between Pskov and Riga and that 11 new bus lines connecting Pskov with its rayon centers and with other oblasts were to be put into operation.

Potentialities for road construction throughout the Economic Region are seriously limited by the presence of extensive forested areas, particularly in the E part of Leningradskaya and Novgorodskaya Oblasts and by extensive swampy terrain. As Map IV indicates, most of the roads run in a N-S direction.

In each of the 3 oblasts comprising the Economic Region, the Oblast Directorate of Automotive Transport and Highways, subordinate to the RSFSR Ministry of Automotive Transport and Highways, has charge of

repair and construction of roads within its respective oblast.

5. <u>Air</u>

Leningrad, a point of international entry, is second only to Moskva as an air transport center. There are 48 targeted airfields in the Economic-Administrative Region, of which 17 are located in the Leningrad City Administrative area. The most important civil airfield in the region is Leningrad Airfield (Target 0153-8048), a Class II civilian operated airfield (refer to Map V), used jointly by civilian and military planes. This airport, located 5 miles SSW of Leningrad, has 5 flights daily to Moskva, a daily flight to Murmansk and Arkhangelsk, and regularly scheduled flights to Odessa, Kiev, Kharkov, Smolensk, and other cities. It is a scheduled stop on the Moskva-Leningrad-Helsinki-Stockholm route.

In addition, only 5 other joint civil/military airfields exist in the Economic Region; the remaining 41 airfields are military airfields. The 5 airfields operated by the SAF and used jointly by civilian and military planes are: Velikiye Luki Airfield (Target 0153-8131), a Class IV airfield; Leningrad/Ruchi Airfield (Target 0103-8607) a Class IV airfield located NNE of Leningrad; Borovichi Airfield (Target 0154-8008) a Class IV airfield; Novgorod Southwest Airfield (Target 0153-8140) a Class V airfield; and Pskov Airfield (Target 0153-8058) a Class II airfield. The one at Velikiye Luki is used by international airlines as an emergency landing ground. Recent reports indicate that there are as few as 6 flights a day originating from this airfield.

The Northern Directorate of Civil Air Fleet, located in Leningrad and directly subordinate to the USSR Chief Directorate of Civil Air Fleet under the USSR Ministry of Defense in Moskva, coordinates all civil air traffic in passengers, freight, and mail throughout the Economic Region and along air routes to Helsinki and the Baltic region.

6. Pipelines

A gas pipeline extending 106 statute miles between Kohtla-Yarve in Estonskaya SSR and Leningrad, with a throughput capacity of

130,780 cubic yards per day, was constructed in 1948. The pipeline runs E and N-E from Kohtla-Yarve over level terrain, parallelling the Narva-Leningrad highway (refer to Map IV). This line, fed by the gas works at Slantsy and Kohtla-Yarve, supplies the industries and houses of Leningrad with gas manufactured from oil shale, thus reducing the amount of coal brought into the city. Known underground storage facilities are in Kohtla-Yarve and Leningrad. In March 1954, it was reported that the construction of a second gas pipeline between Kohtla-Yarve and Leningrad had been begun, but it is not known if it is completed.

Preparations were under way in 1956 for piping natural gas into the city of Leningrad from the western Ukraine. Orginally it was planned to construct a gas pipeline from Dashava to Leningrad via Minsk. An underground gas reservoir was to be built near Pskov on the proposed route. Reports in July 1957 indicate that this plan has been dropped because the gas reserves in the western Ukraine are now believed to be insufficient to meet Leningrad's needs.

The construction of a natural gas line from Serpukhov, 60 miles S of Moskva, to Leningrad is underway. It is reported that by 1959 gas from the Stavropol and Shebelinka deposits will be carried along this route. By 1959, it is estimated that Leningrad will receive 7.19 million cubic yards of gas, 8 times more than in the summer of 1956. By 1960, it is anticipated that most industrial establishments, all communal, educational, and medical establishments will use gas as a fuel. Also planned is a gas line from Bryansk to Leningrad.

Plans, not yet completed but already announced, indicate that gas lines between Leningrad and Novgorod, and between Novgorod and Valday, are under consideration.

D. <u>Utilities</u>

Facilities for providing utilities to the population and industrial enterprises of the Leningrad Economic-Administrative Region were severely damaged during World War II. Much construction of utility facilities has taken place, but at the present time most of the region

(with the exception of the city of Leningrad) still has inadequate facilities.

The Leningrad Regional Power Network, controlling power plants with a total installed capacity of about 1,500,000 kw, furnishes power to the industrial complex around the city of Leningrad, to the Estonskaya SSR, and to Leningradskaya and Novgorodskaya Oblasts. Since 1955 the Leningrad and Estonian Power Networks have been furnishing power to the population and enterprises of both areas. The export of power to either area is jointly controlled by the Estonian Power Economy Branch Directorate and the Leningrad Power and Fuel Branch Directorate. At the present time Pskovskaya Oblast is not connected to the power network, but upon completion of a high-voltage power line from Ivan-Gorod to Slantsy, and then from Slantsy to Pskov, all administrative areas of the region will be connected (see Map III for these locations).

The network furnishes the city of Leningrad and its suburbs with power from hydropower plants at Volkhov, Podporozhye, Svirstroy, Roukhiala, Enso (Svetogorsk), and Narva (Estonskaya SSR), and from thermal power plants at Dubrovka, and Tallin. The hydroelectric power plants supply almost 50 per cent of the power used by industry, transportation, and the city economy of Leningrad. The remaining power is supplied by 8 major thermal power plants and many smaller industrial power plants located in or near the city of Leningrad. About 70 per cent of the thermal power plants use peat as fuel, the remaining 30 per cent using coal and mazut.

Recent Soviet reports indicate that most of the hydraulic energy of the large rivers in the Economic Region has been utilized; new hydropower stations of average power can be built only on the lower courses of the Vuoksi and Neva Rivers. The emphasis now, and in the future, will be on the construction of thermification plants (generation of electricity at central heating plants) based upon local fuel, peat. A large thermal power station, under construction about $2\frac{1}{2}$ miles W of Narva, will be a major power producer of the Baltic area. Much of its power will be

transmitted to Leningrad and Leningradskaya Oblast. Construction research and geological research is reported to be taking place in the Economic Region in connection with the construction of an atomic electric power plant with a capacity of 400 - 600,000 kw. It is planned to begin construction of this plant about 1960. Also in the planning stage is the construction of a hydropower plant on the Neva River near Leningrad. This plant will provide additional power for the city and is considered necessary to prevent the flooding of industrial enterprises and houses in the Nevskiy city rayon. In the rural areas of Leningradskaya Oblast 227 electric power stations, functioning independently of a power network, and with a reported installed capacity of 11,682 kw (1955), provide power to rural rayon centers, sovkhozes, kolkhozes, MTS's, and other rural enterprises. The number and capacity of rural power stations in Pskovskaya and Novgorodskaya Oblasts is not available.

In addition to Leningrad, Kolpino, Petrodvorets, and Pushkin are reported to have public water supply systems. The extent of their service is not known but scattered reports indicate that the water systems generally service only the center of the cities and that suburban districts (including those of Leningrad) have access to public water only through street taps and hydrants. Two purification plants supply Leningrad with 220 million gallons a day (1955). It is not known if purification plants exist in other cities of the Economic Region but reports indicate that water must be boiled before drinking, even in Leningrad.

No sewage treatment plants have been reported. Sewage in Leningrad is drained into the Neva, Fontanka, and Pryazhka Rivers and also into sewage-disposal fields.

Gas, used for heating, cooking, and refrigeration, is at present utilized in 15 city rayons of Leningrad. The length of the gas mains exceeds 497 statute miles, and 90 per cent of the apartments use gas. The gas supply of Leningrad comes chiefly from the oil-shale fields in Estonskaya SSR. Before completion of the pipeline, gas was produced in one coke-gas plant in Leningrad, which was able to serve only 7 per cent

of the population. Plans, in 1956, to build a gas pipeline from Dashava (in Ukrainskaya SSR) to Leningrad, have been dropped because the gas reserves in the western Ukraine are now believed to be insufficient to meet the city's needs. In 1957 plans were announced concerning the construction of a natural gas line from Serpukhov, 60 miles S of Moskva, to Leningrad. By 1959 it is estimated that Leningrad will receive 5.5 billion cubic meters of gas (7.19 million cubic yards), 8 time more than in the summer of 1956. There are no indications that gas is extensively used in the Economic Region outside the city of Leningrad.

Some of the power stations in Leningrad also supply heat, chiefly to industrial, administrative, or institutional buildings. In the past most apartment buildings had their own central heating systems but recent reports indicate that many of these are being connected to a centralized heat and hot water supply. Outside the city of Leningrad, heat is probably supplied by local supplies of firewood, peat, and shale-gas and less by centralized thermification stations.

Supplementing the roads within the city of Leningrad is a well-developed streetcar and bus transportation system, and the Leningrad Metropolitan (subway); the first section of which was completed in November 1955, connecting the most important industrial and transportation points in Leningrad. At the present time a second section of this line is being constructed.

Control of utilities and the distribution of fuel in the Leningrad Economic-Administrative Region is the responsibility of various government agencies. The control, distribution, and development of the fuel and power resources and enterprises of the Economic Region, after taking into consideration the requirements established by the Sovnarkhoz for enterprises and construction projects under its jurisdiction, will be retained by the local Soviets. The Leningrad Regional Power Network, under the USSR Ministry of Electric Power Stations, controls the generation and distribution of electric power by the major electric power stations in the region. The Oblast Office of the Chief

Directorate of Rural Electrification in the 3 oblasts comprising the region controls the electrification of collective farms and MTS's in the respective oblasts. The <u>Sovnarkhoz</u> controls the supply and distribution of coal, gas, and petroleum to enterprises under its jurisdiction. The supply and distribution of these products to enterprises of local subordination and to the general population is under the appropriate Oblast and City Administrations.

E. Economic Significance

The economy of the Leningrad Economic-Administrative Region is dominated by the city of Leningrad, second only to Moskva as the major industrial center of the USSR. The primary importance of the 3 oblasts comprising the Economic Region is the function they serve in providing the Leningrad City industrial complex with part of its food, fuel, and industrial raw materials requirements. Since the establishment of the Leningradskiy Sovnarkhoz in June 1957, about 650 of the most important enterprises in the Economic Region (about 610 of them in the city of Leningrad alone) have been included within that economic organization. The Sovnarkhoz will undoubtedly have the effect of increasing Leningrad's preponderant role in the economy of the Economic Region. At the present time about 95 per cent of the Economic Region's industrial production is concentrated in the industrial complex centered around the city of Leningrad.

The region has a vital role in the economy of the USSR and RSFSR, accounting for approximately 6 per cent of the total USSR industrial production and approximately 10 per cent of the industrial production of the RSFSR. More than 70 per cent of the region's manufactured products are sent to areas outside the Economic Region.

Leningrad was the leading industrial center of Russia before 1917, and today ranks second only because of the ascendancy of Moskva under Soviet rule. The city still enjoys the reputation of being the most important center in the USSR with regard to the development of new industrial technology. Characterized by a high proportion of skilled

workers, advanced and complex technological processes, and utilizing a relatively low volume of raw materials, Leningrad's industries minimize to some extent their deficiency in raw materials.

Leningrad is second only to Moskva in the extent and diversification of its industry. The city is primarily a heavy industry center, its leading branches being machine building, metalworking, shipbuilding, the manufacture of heavy electrical equipment, and precision tool making. The chemical, woodworking, and cellulose-paper industries are of All-Union importance. Light and food-processing industries occupy a prominent place in the economy of the city.

The city ranks first in the USSR in the production of generators, steam and hydraulic turbines, and the construction of ships. Plants in the city have recently completed 20 turbogenerators for the hydropower plant at Kuybyshev (Zhigulevsk Hydro Power Plant Kuybyshev GES - Target 0165-0076) and are now building turbogenerators for the Stalingrad Hydro Power Plant GES (Target 0235-0137).

Leningrad, the most important shipbuilding center in the USSR, at the present time supplies 40 per cent of the country's newly built craft. The city's shipyards have built about 76 per cent of all oceangoing vessels constructed in the USSR since 1918. Located in the city are 5 major shipbuilding yards: the Baltic, Marti (recent reports indicate the name has been changed to Krylov), Zhdanov, Sudomekh and Krasnyy Sudostroitel yards, about 20 minor yards, and one major ship repair establishment, the Kanonerskiy Yard. The Kronshtadt Shipyard also outfits for the yards in the Leningrad area. Leningrad Shipyard, "Marti" 194 (Target 0153-0088), recently constructed the world's first nuclear icebreaker, the 16,000-ton "Lenin."

Estimated production capacities of selected items are shown in Table XXV. Other significant production includes a wide range of electrical and electronic equipment such as transmitters and instruments for the sputniks, telephone and telegraph equipment, oil circuit breakers, mercury are rectifiers, electric lamps, electric motors, and electrical

TABLE XXV

ESTIMATED PRODUCTION CAPACITIES OF SELECTED ITEMS IN THE CITY OF LENINGRAD

Per Cent of Estimated Item USSR Production Capacity Technical cloth Viscose Generators Steam turbines Rubber footwear Hydraulic turbines Ships (construction) Crude abrasives 27 Torpedoes 22 Optical equipment 22 Transformers 19 18.61/ Railroad passenger cars Bonded abrasives 18 Railroad passenger cars (repair) 17 17 17 16 15 14 14 14 Sea mines Electron tubes Tanks and self-propelled guns Electric wire and cable Ships (repair) Lead acid batteries Chemical warfare agents, standard Radio and television equipment 12 Chemical equipment 12 Leather footwear 11.11/ High-pressure boilers 11 10.11/ Soap Earth-moving equipment Knitted outer-garments Linen tricot Stockings and socks Major-caliber guns 888654444 Rubber tires Sulphuric acid Propellants Machine tools Chlorine Refined copper Smelted copper Aircraft engines

^{1/} Reported production.

welding machines; precision instruments including measuring instruments,
of electronic microscopes, pyrometer, meteorological equipment, calculators,
temperature control apparatus, and electric gauges; chemical manufactures
including rubber manufactures, paint, lacquer, acids, synthetics, plastics,
perfumes, pharmaceutical products, and mineral fertilizers.

The spinning, garment, and leather footwear industries in Leningrad are of All-Union significance, and the city's food processing industry serves not only the population of the city but adjacent areas as well.

There are several enterprises in Leningrad engaged in producing prestressed concrete.

Industry outside the city of Leningrad is most highly developed in Leningradskaya Oblast, next in Novgorodskaya Oblast, and least in Pskovskaya Oblast. Heavy industry is the predominant type of industry in Leningradskaya Oblast, chiefly metalworking, machine construction, extraction of fuel, power development, and production of building materials. Also well developed are the woodworking, light, and food industries. All of these industries are closely allied with those in Leningrad.

Three important industrial centers in Leningradskaya Oblast are Kolpino, Volkhov, and Vyborg. The former, which lies within the Leningrad City Administrative Area, is a heavy industry center, with metalworking, machine building, and machine tool industries closely connected with those of its parent city.

Volkhov, 77 miles E of Leningrad, has the most highly developed industry based on local raw materials and local power in the entire Economic Region. Its important aluminum industry is based on local bauxite deposits and power is furnished by Volkhov Hydroelectric Power Plant GES (Target 0153-0036).

Vyborg, 70 miles NW of Leningrad, ranks next in importance as an industrial center in the oblast. It manufactures agricultural machinery, is a shipbuilding and ship-repair center, and has metalworking, lumber, paper, and textile industries.

In addition, other cities which have metalworking and machine building as their main industry are Gatchina, Pavlovsk, and Sestroretsk.

Novgorodskaya Oblast's industries are fewer in number and of less significance than those in Leningradskaya Oblast. The oblast's major industries are wood processing, sawmilling, veneering, paper milling, the manufacturing of furniture, matches, and other wooden products, and the processing of local mineral resources, peat, silicates, and clay. Also widely developed are the embroidery knitted wear industries. There are 3 main centers of industry in Novgorodskaya Oblast. One is Borovichi; a second is the region around Lake Ilmen where Novgorod and Staraya Russa are located; and the third is along the October Railroad, particularly in the Chudovo region.

Borovichi is the largest industrial city in Novgorodskaya Oblast. Its industry is based to a great extent on local clay deposits and timber resources. It has clay-processing industries, ceramic plants, brickworks, paper and lumber processing industries, as well as metalworking and knitted wear industries. In the region near Borovichi lignite is mined. In the Chudovo region there is sawmilling, match manufacturing, chinaearthenware, glass, and cement industries.

The most important branches of industry of the city of Novgorod are ship-repair, woodworking, the manufacture of household pottery and china, and food processing. Staraya Russa, the third-ranking city in the oblast has woodworking, veneering, brick, and tile industries. In Novgorodskiy Rayon, centered around Tesovo-Netylskiy, the peat-processing industry is important.

Novgorodskaya Oblast is one of the most important flax growing areas in the USSR. Ten to 12 per cent of the sown area of the oblast is in this crop; the flax-processing industry is concentrated mainly in Okulovskiy Rayon.

Pskovskaya Oblast is the least important industrial area of the 3 oblasts in the Economic-Administrative Region. It is the best suited for agriculture, and is a leading flax-growing region in the

USSR. Flax-growing, which occupies about 15 per cent of the sown area in the oblast, is an important basis of the oblast's industrial activity.

The major types of industry in the oblast are flax and food processing, particularly dairy and meat products. Second in importance is the processing of lumber and third is the extraction and processing of local resources of peat and building materials. Other branches of industry are metalworking, garment and footwear manufacturing.

Pskov, the most important city in the oblast, has as its major industrial activity the production of flax-processing machinery and the manufacture of flax textiles. Food processing, particularly of poultry products, is also important. Velikiye Luki, the second largest city in the oblast, has important railroad-servicing enterprises and construction materials, lumber, and food processing industries. Nevel, which ranks third in population, has flax and food processing enterprises. Other flax processing industries are located at Ostrov, Opochka, Porkhov, and Pechory.

The Economic-Administrative Region is not well endowed with mineral resources (refer to Map IV). There are some lignite deposits near Borovichi, shale near Slantsy and Gdov, and bauxite in the Boksitgorsk and Tikhvin areas. Building materials, such as limestone, dolomite, gypsum, and clay, are found in the region. There are large peat deposits in Leningradskaya and Novgorodskaya Oblasts, but peat extraction comprises only one to 2 per cent of the All-Union total. Numerous rivers in the region, particularly those in Leningradskaya Oblast, are a major source of inexpensive electric power. Forests are the most important natural resource, occupying about 40 per cent of the area of the Economic Region. To meet the needs of Leningrad's numerous industries, the city has to import from outside the region more than 70 per cent of the raw materials and 90 per cent of the fuel it requires. Coal is imported from the Pechora Basin and from Poland; iron, nickel, apatite, and nepheline are imported from the Kola Peninsula; steel is brought in from the Cherepovets region (Vologodskaya Oblast),

the Urals, and the Don Basin, oil from the Volga region, shale gas from Estonskaya SSR, and cotton from the Ukraine and Central Asia.

Intensive efforts are being made to find closer sources of supplies of industrial raw materials. Exploitation of petroleum and coal deposits in the Far North, and more vigorous exploitation of fuel sources (shale, peat, and lignite deposits) within the Economic Region are being practiced. Along with the development of fuel resources, steps have been taken to give Leningrad its own metallurgical supply base. An iron and steel works has been constructed at Cherepovets (Vologodskaya Oblast) based on coal from Vorkuta and iron ore from Karelskaya ASSR and Murmanskaya Oblast.

It is well known that production capacities of many enterprises in the Soviet Union are used irrationally and this applies to those in Leningrad also. Khrushchev, in his theses on the formation of the Sovnarkhoz, March 30, 1957, cited Leningrad as an example. He stated that Leningrad produces annually up to 360,000 tons of pig iron and steel, of which only 250,000 tons are used by its industries, the rest being shipped elsewhere. At the same time Leningrad received up to 40,000 tons of large iron and steel castings from other parts of the USSR.

Except for the industrial concentration in and near the city of Leningrad, the economy of the region is primarily agricultural. The agricultural activity is devoted to the growing of potatoes, vegetables, and flax, and to the raising of dairy cattle and pigs. Agriculture in the region is devoted primarily to supporting the local economy, except for flax which is exported to other areas of the USSR.

The W part of Leningradskaya Oblast serves as a supplier of vegetables, potatoes, and milk for the city of Leningrad. Grain is also grown; rye and oats are the principal products. In the N and E parts there is not much cultivation, largely because of the extensive forests; dairying predominates in this region. By 1960, Leningradskaya Oblast hopes to become self-sufficient in the production of cabbage,

carrots, beets, milk, and, to a large extent, in potatoes and meat.

In Novgorodskaya Oblast flax, rye, and oats are the principal crops. The oblast produces enough vegetables and potatoes for its local needs and exports some to Leningrad and other industrial centers. The raising of livestock is also important. Agricultural production is limited in the oblast because of poor and swampy soil, and because more than 42 per cent of the land area is in forests.

Pskovskaya Oblast is the best suited for agriculture of the 3 oblasts in the Economic Region. This is due to its warmer climate, relatively productive loamy soils, and its lower percentage of forests, only about 20 per cent of the oblast land area. The oblast is one of the chief flax growing areas in the USSR. Rye, oats, barley, peas, and wheat are also grown. Potatoes and other vegetables are grown in sufficient quantities to supply local needs. Dairy farming is important.

All agricultural land in use by rural enterprises and households in the region in November 1955 totalled approximately 21.5 million acres, about 43 per cent of the total land area. Of this total about 5 million acres were under cultivation. In Leningradskaya Oblast in 1956, about 4 per cent of the total land area was in crop acreage; in Novgorodskaya Oblast about 9 per cent; and in Pskovskaya Oblast about 16 per cent. Extensive meadow lands occupy a large part of the agricultural lands, about 14 per cent on the average for the region.

The region had at the end of 1956 the following number of agricultural enterprises:

	Collective Farms	State Farms	MTS's
Leningradskaya 0. Novgorodskaya 0. Pskovskaya 0.1	442 1,005 1,550	123 51 40	44 50 95
Regional Total	1 2,997	214	189
1/ Estimated			

Although there are many factors limiting agricultural production in the region, those responsible for agricultural production have been criticized for not utilizing the full potentialities of the region. It has been stated that the amount of land under cultivation could be extended by draining swamps and clearing the land of shrubs and boulders. Ameliorative measures could also raise the productivity of the soil. Nevertheless, in 1956, it was reported that the general state of agriculture in the region was not satisfactory. Grain, vegetable, and potato yields were low. Productivity of livestock was low because of inadequate fodder and poor breeding. The number of cows in the region in 1955 was still below the prewar level, In Leningradskaya Oblast, during the period 1951-55, the number of sheep on collective farms decreased by 25 per cent. There was criticism in 1956 to the effect that Pskovskaya Oblast's output of dairy products was low and that its average milk yield was only half of that obtained in Leningradskaya Oblast. In 1955 it was reported that a quarter of the tractors in Leningradskaya Oblast were idle each day and that the MTS's were not fulfilling their contracts adequately or on time. This unsatisfactory state of affairs in agriculture was declared to be the result of poor management and organization, rather than of physical conditions, and local Party organizations were criticized for not exercising adequate leadership.

The Leningrad City Executive Committee Department of Agriculture probably controls truck gardening, dairying, and other agricultural enterprises within the metropolitan area as well as supervising the distribution of these products to the city's population. The Chiefs of the Oblast Directorate of Agriculture and the Oblast Directorate of Grain Products in each of the oblasts of the Economic-Administrative Region supervise the agricultural production in their respective spheres through the rayon executive committees and the rural soviets. The local soviets in rural areas have been given increased responsibilities for agricultural activity in their districts. They may, for example,

require reports from collective farms administrations on the fulfillment of plans, progress in sowing and harvesting, and fodder procurement. They may also require reports from the director of a state farm within their region on the fulfillment of production plans. The local soviets are supposed to give all possible help in carrying out these activities, and in addition, to organize competition for plan fulfillments between collective farms, between state farms, and also to provide courses in agrotechnology and zootechnology for collective and state farm workers.

Under the reorganization of the economy which took place in the spring of 1957, some of the local enterprises of the abolished Meat and Milk Products Ministry and the Food Products Ministry were transferred to the local soviets. The larger enterprises were put under the supervision of the <u>Sovnarkhoz</u>. Food processing and distribution is under the supervision of the <u>Sovnarkhoz</u> and local soviets.

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URBAN AREA POPULATION RANGES: 1959

Divisions	Population Ranges	Number of Urban Areas	Population (thousands)	Per Cent of Total
Leningrad Economic- Administrative Region	over 100,000 50,000-100,000 20,000- 50,000 10,000- 20,000 less than 10,000	1 7 15 20 <u>75</u> 118	2,875 394 474 263 <u>428</u>	64.7 8.9 10.7 5.9 9.6 99.81
Leningrad City Adminis- trative Area	over 100,000 50,000-100,000 20,000- 50,000 10,000- 20,000 less than 10,000	1 2 6 2 <u>10</u>	2,875 113 195 30 75	87.2 3.5 5.9 .9 .2.3
	Total	21	3,288	99.84
Leningradskaya Oblast (less Leningrad City Administrative Area)	over 100,000 50,000-100,000 20,000- 50,000 10,000- 20,000 less than 10,000		 104 167 158 <u>203</u> 632	16.5 26.4 25.0 32.1
	Total	57	عره	20000

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Divisions	Population Ranges	Number of Urban Areas	Population (thousands)	Per Cent of Total
Novgorodskaya Oblast	over 100,000 50,000-100,000 20,000- 50,000 10,000- 20,000 less than 10,000	0 1 2 2 <u>18</u>	51 84 31 96	19.4 32.1 11.8 36.7
	Total	23	262	100.0
Pskovskaya Oblast	over 100,000 50,000-100,000 20,000- 50,000 10,000- 20,000 less than 10,000	0 2 1 4 <u>10</u>	126 28 44 _54	50.0 11.1 17.5 21.4
	Total	17	252	100.0

^{1/} The missing two-tenths of one per cent represents 8,000 rural population estimated to reside in 5 selsovets in the Leningrad City Administrative Area but which was not distributed among the urban areas located in the Administrative Area. Throughout this study this population has been treated as part of the urban population of the Leningrad City Administrative Area. Therefore, the Leningrad City Administrative Area total population is 3,296,000 and the total urban population of the Leningrad Economic-Administrative Area is 4,442,000. See also footnote 3/, Table VI, page 23.

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The Leningrad Economic-Administrative Region contains the following urban areas:

LENINGRADSKAYA OBLAST

Leningrad

59-55 N; 30-15 E.

Population: 2,875,000 (1959 est. for the city proper);
3,296,000 (1959 est. for the Leningrad administrative

Administration: Capital of Leningradskaya Oblast; city
of Republic (RSFSR) subordination; Oblast Committee
of Communist Party; City Committee of Communist Party;
Council of National Economy (Leningradskiy Sovnarkhoz);
Oblast Executive Committee; City Executive Committee;
MVD Department of Local Anti-Air Defense; Oblast
Society for Cooperation with Army, Air Force and
Navy (DOSAAF); Oblast Red Cross Society.

Military: Headquarters: Leningrad Military District;

13th TAA; 12th Air Defense Region; 2 u/i AA (PVO) Div;

MVD Security Troops; 392nd MVD Convoy Regt., Naval

Border Guard, MVD. Naval training center.

Airfields: One Class 2 (jnt.); 3 Class 2 (mil.); one Class 3 (mil.); 3 Class 4 (1 mil, 1 jnt., 1 unk.); 4 Class 5 (mil.); 1 Class 6 (mil.).

Transportation: Directorate, October Railroad System;
Division Headquarters, October Railroad System
(Tallin Line, Warsaw Line, Vitebsk Line, Moskva Line,
Murmansk Line); 5 engine depots; classification yard;
5 steam locomotive engine houses; railroad car
repair shop; steam locomotive repair shop; principal
seaport of USSR.

Economic: Second leading industrial center in USSR; machine-building and metalworking most important; produces heavy equipment, machines, and tools for power, metallurgical, electrical, coke-chemical, transportation, communication industries and for agriculture; ranks first in production of generators (reported 63 per cent of USSR production), steam turbines (reported 56 per cent of USSR production), hydraulic turbines (reported 48 per cent of USSR production); produces high pressure boilers (est. 11 per cent of USSR capacity), earth moving equipment (est. 9 per cent of USSR capacity), machine tools (est. 5 per cent of USSR capacity), aircraft engines (est. 4 per cent of USSR capacity); some important heavy equipment plants are: Leningrad Heavy Equipment Plant, "Nevskiy Lenin" 232 (Target 0153-0090), Leningrad Electric Equipment Plant, "Elektrosila Kirov" 38 (Target 0153-0016), Leningrad Heavy Equipment Plant, "Krasnyy Putilov Kirov" 185 (Target 0153-0029). Leads in manufacture and repair of railroad passenger cars (reported 18.6 per cent of USSR production and est. 35 per cent of USSR repair capacity). Most important shipbuilding and ship-repair center in USSR (reported 40 per cent of USSR shipbuilding and est. 14 per cent of USSR ship-repair capacity). Important manufacturer of electrical equipment: ranks first in production capacity of radio and television equipment (est. 12 per cent of USSR capacity); second in production capacity for electron tubes (est. 17 per cent of USSR capacity), electric wire and cable (est. 15 per cent of USSR capacity), transformers (est. 19 per cent of USSR capacity); produces electric lamps,

Leningrad (Contd.)

motors, welding equipment, mercury arc rectifiers, oil circuit breakers. A leading producer of precision instruments and equipment: ranks first in production capacity of optical equipment (est. 22 per cent of USSR capacity); precision measuring instruments, electronic microscopes, pyrometers, meteorological equipment, calculators, temperature control apparatus, electric gages. Important chemical products: ranks first in production capacity of sulphuric acid (est. 27 per cent of USSR capacity); ranks second in production capacity of crude abrasives (est. 27 per cent of USSR capacity), bonded abrasives (est. 18 per cent of USSR capacity), lead acid batteries (est. 14 per cent of USSR capacity), chemical equipment (est. 12 per cent of USSR capacity); also production facilities for synthetics, plastics, propellants (est. 6 per cent of USSR capacity), chemical warfare agents, standard (est. 14 per cent of USSR capacity), chlorine (est. 4 per cent of USSR capacity), soap (reported 10.1 per cent of USSR production), mineral fertilizers, pharmaceutical products. Important armaments: missiles (See Military, Section I., B., 2.) torpedoes (est. 22 per cent of USSR capacity), sea mines (est. 16 per cent of USSR capacity), tanks and self-propelled guns (est. 16 per cent of USSR capacity), major-caliber guns (est. 8 per cent of USSR capacity). Woodworking, cellulose-paper, spinning, garment, and footwear industries of national importance: leather footwear (reported 11.1 per cent of USSR production), rubber footwear (reported 48.9 per cent of USSR production), stockings and socks (reported 8.1 per cent of USSR production), knitted outer-garments (reported 8.6 per cent of USSR production); important light and food-processing industries; also printing, film, musical instruments enterprises. Numerous textile enterprises: leading producer of viscose (reported 65 per cent of USSR production), technical cloth (reported 70 per cent of USSR production), linen tricot (reported 8.5 per cent of USSR production); also produces rubber tires (est. 8 per cent of USSR capacity), refined copper (est. 4 per cent of USSR capacity), smelted copper (est. 4 per cent of USSR capacity); several large prestressed ferroconcrete plants. Leningrad Electric Power Grid includes 16 major power stations, totalling 1,558,000 kw.

Educational: 41 institutions of higher education:

Leningrad State University and the following institutes and academies: polytechnical, mining, technological, electrical engineering, constructional engineering, precision mechanics and optics, textile, refrigeration technology, aviation equipment construction, electrotechnical communications, agricultural, agricultural mechanization, shipbuilding, railroad transport, water transport, engineereconomics, finance-economics, industrial, engineering-seamanship, hydrometeorological, chemical-pharmaceutical, sanitation-hygiene, Soviet trade, forestry (2), food industry technology, film engineers, drama, painting-sculpture-architecture, library, state conservatoire, industrial art, pedagogical (4), first

Leningrad (Contd.)

medical, pediatrics, physical culture, veterinary. 90 tekhnikums and other specialized secondary schools: industry and construction (42); transport and communications (8); economics and law (5); enlightenment (9); art (6); health (19); agriculture (1). Refer also to Leningrad Target Complex Study (A-II, 0153-9997, March 1950, revised 1951, SECRET) for more detailed city analysis.

Pushkin

59-42 N; 30-24 E.

Population: 58,000 (1959 est.).

Administration: City subordinate to Leningrad City

Executive Committee.

Airfields: One Class 1 (mil.).

Economic: Brickyard, sawmill, motor vehicle repair

plant, agricultural equipment repair plant, metal

products factory, furniture factory, textile plant,

slaughterhouse.

Educational: Agricultural institute, military school.

Kronshtadt

59-59 N; 29-47 E.

Population: 55,000 (1959 est.).

Administration: City subordinate to Leningrad City

Executive Committee.

Military: Operating base and most important repair

base of Baltic Fleet.

Airfields: One Class 4 (mil.); one Class 7 (mil.).

Economic: Shipyard - does outfitting for the shipbuilding yards in Leningrad city area, and has facilities for building medium-sized submarines. Liquid fuels storage (nonrefinery).

Vyborg

60-43 N; 28-44 E. Population: 54,000 (1959 est.). Administration: City of oblast subordination; center of Vyborgskiy Rayon. Military: Headquarters, 45th Guards Rifle Div.; naval training center. Airfields: One Class 2 (mil.). Transportation: Division Headquarters, October Railroad System; major rail junction; steam engine house, engine depot; principal seaport. Economic: Important commercial and industrial center; shipyard; metalworking; agricultural machinery, electrical instruments, furniture, fish nets, textiles; paper milling; fish canneries, brickyard, liquid fuels storage (nonrefinery). Educational: Pedagogical institute; school for medical aids and midwives.

Volkhov

59-54 N; 32-21 E.

Population: 50,000 (1959 est.).

Administration: City of oblast subordination; center of Volkhovskiy Rayon.

Airfields: One Class 4 (mil.).

Transportation: Division Headquarters, Kirov Railroad System; major rail junction; engine depot, car repair shop, steam engine house; turnaround point; classification yard; port facilities on Volkhov River.

Economic: Aluminum-refining center; metalworking, sawmilling, food processing; asphalt concrete plant,

(Contd.)

cement plant, paper combine, porcelain factory; extraction of refractory clay; liquid fuels storage (nonrefinery); hydroelectric power plant (80,000 kw.). Educational: Railroad tekhnikum; railroad, medical and trade schools.

Gatchina

59-34 N; 30-07 E.

Population: 48,000 (1959 est.).
Administration: City of oblast subordination; center

of Gatchinskiy Rayon.

Military: Headquarters, 8th Army.

Airfields: One Class 4 (mil.).

Transportation: October Railroad System; rail junction; engine depot, steam engine house; turnaround point.

Economic: Industrial center; metalworking; machine castings plant, motor vehicle repair plant, machine-foundry plant, aircraft engine repair plant, armament plant, shale oil distillation plant, cement plant,

lumber milling, peat works. Educational: Teachers'school.

Kolpino

59-45 N: 30-36 E.

Population: 48,000 (1959 est.).

Administration: City subordinate to Leningrad City Executive Committee.

Economic: Heavy equipment plant produces naval equipment, machine tools, steam engines, steel-rolling equipment; steel plant, machine shop, motor vehicle repair plant, tank plant, asphalt plant, chemical plant, brickworks, sawmill; food processing; liquid fuels storage (nonrefinery); heat and power plant (36,000 kw.).

Petrodvorets

59-53 N; 29-54 E.

Population: 40,000 (1959 est.)

Administration: City subordinate to Leningrad City

Executive Committee.

Transportation: Port facilities.

Economic: Production of industrial gems (for precision tools); watch factory; electrical instrument plant.

Educational: Naval academy. Tsar's former palace,

"Petergof."

Sestroretsk

60-06 N; 29-57 E.

Population: 34,000 (1959 est.).

Administration: City subordinate to Leningrad City

Executive Committee.

Transportation: Port facilities on Gulf of Finland.
Economic: Possible guided missile plant, footwear
factory. Metalworking, cutting tool plant,

machine tool plant, chemical plant.

Luga

58-44 N; 29-51 E.

Population: 30,000 (1959 est.).

Administration: City of oblast subordination; center

of Luzhskiy Rayon.

Economic: Metalworking; crucible works, metallurgical plant, production of bonded abrasives; textile combine.

meat combine, tannery, sawmill, brickworks.

Educational: School for medical aides and midwives.

Pavlovsk

59-42 N; 30-27 E.

Population: 28,000 (1959 est.).

Administration: City subordinate to Leningrad City

Executive Committee.

Economic: Metalworking, shoe manufacturing, cement plant, brickworks.

Educational: Trade tekhnikum; agricultural mechaniza-

tion school.

Lomonosov

59-55 N; 29-46 E.

<u>Population</u>: 25,000 (1959 est.)

Administration: City of oblast subordination; center

of Lomonosovskiy Rayon.

Airfields: One Class 6 (mil.)

Transportation: Secondary sea port on the Gulf of Finland; important base for coastal patrol vessels,

submarines, destroyers and minesweepers.

Economic: Metalworking; machine-foundry plant, railroad locomotive repair shop, engine repair shop; extraction and production of construction materials; brickworks, lumber mills, fish combine, liquid fuels storage

lumber mills, fish combine, liquid fuels storage (nonrefinery).

Educational: Nursing school, agricultural mechanization school.

Uritsk

59-51 N; 30-14 E..

Population: 25,000 (1959 est.).

Administration: Town subordinate to Kirovskiy Rayon

Executive Committee of City of Leningrad. Economic: Metal and clothing industries.

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Lodeynoye Pole 60-44 N; 33-34 E.

Population: 22,000 (1959 est.).

Administration: Town of rayon subordination; center

of Lodeynopolskiy Rayon.

Airfields: One Class 2 (mil.).

Transportation: Kirov Railroad System; steam engine house; locomotive repair shop; port facilities on the

Svir River.

Economic: Railroad servicing enterprises, machine

works, motor vehicle tractor plant, sawmills, brickworks, meat combine, food processing.

Educational: Railroad tekhnikum, teachers' school.

Naziya

59-51 N; 31-36 E.

Population: 22,000 (1959 est.).

Administration: Urban settlement located in Mginskiy

Rayon.

Economic: Large peat-extracting center.

Tikhvin

59-38 N; 33-31 E.

Population: 20,000 (1959 est.).

Administration: City of oblast subordination; center

of Tikhvinskiy Rayon.

Transportation: Kirov Railroad System; steam engine

house; turnaround point.

Economic: Woodworking center; sawmilling, alunite processing; woodpulp-chemical combine, metalworks,

cement plant, peat plant, flour milling, food proces-

sing, liquid fuels storage (nonrefinery).

Educational: Forestry tekhnikum, teacher's chool.

Zelenogorsk

60-12 N; 29-46 E.

Population: 20,000 (1959 est.).

Administration: Town subordinate to Kurortnyy Rayon

Executive Committee of City of Leningrad.

Economic: Health and vacation resort; machine plant.

Kirovsk

59-52 N; 31-00 E.

Population: 18,000 (1959 est.).

Administration: Town of rayon subordination located in

Mginskiy Rayon.

Economic: Aluminum plant, ammunition plant, chemical

combine, food processing.

Slantsy

59-06 N; 28-05 E.

Population: 16,000 (1959 est.).

Administration: Town of rayon subordination; center of

Slantsevskiy Rayon.

Economic: Shale extraction and processing center; gasshale plant; shale-ash brick plant, cement plant, metalworking plant, motor vehicle parts plant, loco-

motive repair shop; brickyards, sawmill.

Ulyanovka

59-39 N; 30-46 E.

Population: 16,000 (1959 est.).

Administration: Urban settlement located in Tosnenskiy

Rayon.

Transportation: October Railroad System; rail junction. Economic: Agricultural activity, lumbering and peat

extraction carried on in the area.

<u>Pargolovo</u>

60-04 N: 30-18 E.

Population: 15,000 (1959 est.).

Administration: Urban settlement subordinate to

Stalinskiy Rayon Executive Committee of City of Lenin-

grad.

Military: Headquarters, 63rd Guards Rifle (Mecz?) Div.

Economic: Metalworks; peat extraction nearby.

Podporozhye

60-55 N; 34-12 E.

Population: 15,000 (1959 est.).

Administration: Town of rayon subordination; center

of Podporozhskiy Rayon.

Transportation: River port facilities.

Economic: Boat-repair yard, lumber combine, wood processing, ore dressing plant, metalworks, electric

repair shop, concrete block plant, paper mill, sawmill,

extraction of building materials, food processing,

hydroelectric power plant (160,000 kw).

Strelnya

59-52 N; 30-04 E.

Population: 15,000 (1959 est.).
Administration: Urban settlement subordinate to Petro-

dvorets City Executive Committee.

Economic: Shipyard, turpentine plant, metal construction

factory; poultry incubator station.

Tosno

59-33 N; 30-51 E.

Population: 14,000 (1959 est.).

Administration: Urban settlement; center of Tosnenskiy

Rayon.

Tosno (Contd.) Economic: Peat briquet plant, autobus-body plant, motor vehicle plant, hat factory, sawmilling, brickyards.

Krasnoye Selo

59-43 N; 30-09 E.

<u>Population</u>: 12,000 (1959 est.)

Administration: Town of rayon subordination located in

Lomonosovskiy Rayon.

Economic: Paper mill, sawmill, furniture factory, machine repair shop, peat-processing plant, food

processing.

Educational: Tsar's former Summer Palace.

Priozersk

61-03 N; 30-08 E.

Population: 12,000 (1959 est.).

Administration: City of oblast subordination; center of

Priozerskiy Rayon.

Military: Headquarters, 64th Guards Rifle Div.

Economic: Cellulose-paper combine, sawmill, alcohol distillery, concrete plant, textile combine, brick-

works.

Vsevolozhskiy

60-02 N; 30-38 E.

Population: 12,000 (1959 est.).

Administration: Urban settlement; center of Vsevolozh-

skiy Rayon.

Economic: Boat-repair yard; peat beds nearby.

Dubrovka

59-51 N; 30-55 E.

<u>Population</u>: 11,000 (1959 est.).

Administration: Urban settlement located in Vsevolozh-

skiy Rayon.

Transportation: River port facilities.

Economic: Lumber and paper mill center; manufacture of

prefabricated houses; thermal power station

(300,000 kw).

Siverskiy

59-21 N; 30-03 E.

Population: 11,000 (1959 est.).

Administration: Urban settlement located in Gatchinskiy

Rayon.

Airfields: One Class 2 (mil.).

Economic: Health resort; hydroelectric power plant;

lumber milling.

Vyritsa

59-24 N; 30-20 E.

Population: 11,000 (1959 est.).

Administration: Urban settlement located in Gatchinskiy

Rayon.

Economic: Sawmilling.

Petrokrepost

59-55 N; 31-05 E.

Population: 10,000 (1959 est.).

Administration: City of oblast subordination located

in Mginskiy Rayon.

<u>Transportation</u>: Port facilities on the Neva River. <u>Economic</u>: Shipyard, cellulose and paper combine, high explosives plant, textile mill, brickyard; peat beds

nearby.

Boksitogorsk

59-25 N; 33-51 E.

Population: 9,000 (1959 est.).

Boksitogorsk (Contd.)

Administration: Town of rayon subordination; center

of Boksitogorskiy Rayon.

Economic: Aluminum plant (4.2 per cent of USSR capacity); bauxite mining; cellulose and paper plant, cement plant, peat dehydration plant; metalworks; lime deposits.

Kammenogorsk

60-57 N; 29-11 E.

Population: 9,000 (1959 est.).

Administration: Town of rayon subordination located

in Lesogorskiy Rayon.

Transportation: Rail junction.

Economic: Paper factory, extraction of granite, sugar

milling.

Pesochnyy

60-08 N; 30-08 E.

<u>Population</u>: 9,000 (1959 est.).

Administration: Urban settlement subordinate to Sestroretskiy Rayon Executive Committee of City of

Leningrad. Economic: Brickworks.

Pontonnyy

59-47 N; 30-38 E.

Population: 9,000 (1959 est.).

Administration: Urban Settlement subordinate to

Kolpino City Executive Committee.

Economic: Veneer and brick producing center; boatbuild-

ding.

Primorsk

60-22 N; 28-36 E.

Population: 9,000 (1959 est.).

Administration: Town of rayon subordination in Vyborgskiy

Rayon.

Transportation: Secondary seaport.

Economic: Fish-canning center; paper and sawmilling

nearby.

<u>Ust-Izhora</u>

59-48 N; 30-35 E.

<u>Population</u>: 9,000 (1959 est.).

Administration: Urban settlement subordinate to

Kolpino City Executive Committee.

Economic: Brickwerks, sawnilling, shipbuilding.

<u>Imeni Morozova</u>

59-59 N; 31-00 E.

<u>Population</u>: 8,000 (1959 est.).

Administration: Urban settlement located in Vsevolozhskiy R.

Economic: Cotton milling.

<u>Kingisepp</u>

59-23 N; 28-36 E.

Population: 8,000 (1959 est.).

Administration: Town of rayon subordination; center of

Kingiseppskiy Rayon.

Transportation: Port facilities on Luga River.

Economic: Leather footwear factory; sawmilling, dairying,

food processing, shale extraction.

Lakhtinskiy

60-00 N; 30-07 E.

<u>Population</u>: 8,000 (1959 est.).

Administration: Urban settlement subordinate to

Sestroretsk City Executive Committee.

Economic: Peat works.

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Ligovo

59-51 N; 30-14 E.

Population: 8,000 (1959 est.).

Administration: Urban settlement subordinate to Kirovskiy Rayon Executive Committee of City of

Leningrad.

Economic: Truck farming.

Lyuban

59 21 N; 31-16 E.

Population: 8,000 (1959 est.).

Administration: Town of rayon subordination located

in Tosnenskiy Rayon.

Economic: Veneer factory, brickworks, sawmill.

Mga

59-45 N; 31-02 E.

Population: 8,000 (1959 est.).

Administration: Urban settlement; center of Mginskiy

Transportation: October Railroad System; rail junction;

steam engine house.

Economic: Railroad servicing center; railroad equipment repair shop, lumber mill, extraction and production of construction materials, food processing, peat

extraction nearby.

Petro-

Slavyanka

59-48 N; 30-30 E.

Population: 8,000 (1959 est.).

Administration: Urban settlement subordinate to

Kolpino City Executive Committee. Economic: Truck farming, dairying.

Svirstroy

60-48 N; 33-44 E.

Population: 8,000 (1959 est.).

Administration: Urban settlement located in Lodeynopol-

skiy Rayon.

Economic: Possible guided missile plant, steel parts factory, railroad car plant, paper mill, sawmill, ship-repair yard, fish cannery, flour mill, food processing, liquid fuels storage (nonrefinery); hydro-

electric power station (100,000 kw).

Volodarskiy

59-49 N; 30-06 E.

Population: 8,000 (1959 est.).

Administration: Urban settlement subordinate to

Petrodvorets City Executive Committee.

Economic: Truck farming.

Budogoshch

59-17 N; 32-28 E.

Population: 7,000 (1959 est.).

Administration: Urban settlement; center of Kirishskiy

Rayon.

Economic: Brickworks.

Ivan-Gorod

59-22 N; 28-13 E.

Population: 7,000 (1959 est.).

Administration: Town of rayon subordination located in

Kingiseppskiy Rayon.

<u>Airfields</u>: One Class 5 (mil.). <u>Economic</u>: Flax-jute mill; fishing. Educational: Textile tekhnikum.

Otradnoye

59-46 N; 30-49 E.

Population: 7,000 (1959 est.).

Administration: Urban settlement located in Mginskiy

Rayon.

Economic: Brickworks.

Syasstroy

60-08 N; 32-34 E.

Population: 7,000 (1959 est.).

Administration: Urban settlement located in Novoladozh-

skiy Rayon.

Economic: Cellulose-paper combine, woodworking, caustic soda plant, chlorine plant, peat works, brickyard, electric motor repair shop, machine factory, sawmill,

shipyard, food processing.

Druzh**na**ya

Gorka

59-18 N; 30-08 E.

Population: 6,000 (1959 est.).

Administration: Urban settlement located in Gatchinskiy

Rayon.

Economic: Glass manufacturing center; production of laboratory apparatus, glass implements and dishes.

Kikerino

59-30 N; 29-36 E.

Population: 6,000 (1959 est.).

Administration: Urban settlement located in Volosovskiy

Rayon.

Economic: China-ceramics factory, construction materials industry, lime plant, brickyard, liquid fuel storage

(nonrefinery).

Krasnyy Bor

59-41 N; 30-35 E.

<u>Population</u>: 6,000 (1959 est.).

Administration: Urban settlement located in Tosnenskiy

Rayon.

Economic: Glass manufacturing center.

Lesogorskiy

61-03 N; 28-54 E.

Population: 6,000 (1959 est.).

Administration: Urban settlement; center of Lesogorskiy

Rayon.

Economic: Sawmilling and paper milling center; fodder

mixing plant.

Levashevo

60-06 N; 30-12 E.

Population: 6,000 (1959 est.).

Administration: Urban settlement subordinate to Stalin-

skiy Rayon (ward) Executive Committee of City of

Leningrad.

Airfields: One Class 4 (mil.).

Economic: Truck farming, dairying.

Novaya Ladoga

60-07 N; 32-19 E.

Population: 6.000 (1959 est.).

Administration: Town of rayon subordination; center of

Novoladozhskiy Rayon.

Airfields: One Class 5 (mil.); one Class 6 (mil.).

Transportation: Port facilities on Lake Ladoga at

mouth of Volkhov River.

Economic: Ship-repair yard, fishing fleet base, fish

cannery, vodka distillery.

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SECRET

Pikalevo 59-35 N; 34-05 E.

Population: 6,000 (1959 est.).

Administration: Town of rayon subordination located in

Boksitogorskiy Rayon.

Economic: Construction materials industry; building trust, cement works, slate plant, aluminum plant,

motor vehicle repair plant.

Sinyavino 59-50 N; 31-07 E.

Population: 6,000 (1959 est.).

Administration: Urban settlement located in Mginskiy

Rayon.

Economic: Peat extracting center.

Sovetskiy 45-20 N; 34-56 E.

Population: 6,000 (1959 est.).

Administration: Urban settlement located in Vyborgskiy

Rayon.

Economic: Cellulose-paper combine.

<u>Kirishi</u> 59-28 N; 32-00 E.

Population: 5,000 (1959 est.).

Administration: Urban settlement located in Kirishskiy

Rayon.

Transportation: Port facilities on Volkhov River.

Economic: Sawmilling and woodworking center.

Lisiy Nos

60-01 N; 30-00 E.

Population: 5,000 (1959 est.).

Administration: Urban settlement subordinate to

Sestroretsk City Executive Committee.

Economic: Asphalt plant.

Rybatskoye

59-51 N; 30-30 E.

Population: 5,000 (1959 est.).

Administration: Urban settlement subordinate to

Nevskiy Rayon Executive Committee of City of Leningrad.

Economic: Sawmilling center.

Svetogorsk

61-09 N; 28-48 E.

Population: 5,000 (1959 est.).

Administration: City of oblast subordination located

in Lesogorskiy Rayon.

Economic: Cellulose-paper milling center; chlorine

plant, caustic soda plant; 2 hydroelectric power

plants (100,000 kw each).

Tolmachevo

58-52 N; 29-54 E.

Population: 5,000 (1959 est.).

Administration: Urban settlement located in Luzhskiy

Rayron.

Economic: Sawmilling center; brickworks, ceramics plant, peat enterprises, dairy products plant.

Volosovo

59-26 N; 29-28 E.

Population: 5,000 (1959 est.).

Administration: Urban settlement; center of Volosovskiy

Rayon.

Airfields: One Class 5 (mil.).

Economic: Lime and gypsum processing, dairy products

plant, liquid fuels storage (nonrefinery).

Educational: Dairy products industry tekhnikum.

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61-01 N: 35-29 E. Voznesenye

Population: 5,000 (1959 est.).

Administration: Urban settlement located in Podporozh-

skiy Rayon.

Transportation: Port facilities on Lake Onega at outlet

of Svir River.

Economic: Fishing center; metalworks.

60-38 N; 28-34 E. Vysotsk

Population: 5,000 (1959 est.).

Administration: Town of rayon subordination located

in Vyborgskiy Rayon.

Transportation: Secondary seaport on the Gulf of

Finland.

Economic: Health resort; lumber shipping.

59-25 N; 30-07 E. <u>Kobrinskoye</u>

Population: 3,000 (1959 est.).

Administration: Urban settlement located in Gatchinskiy

Rayon.

Economic: Peat processing center.

59-37 N; 30-24 E. Kommunar

Population: 3,000 (1959 est.).

Administration: Urban settlement located in Gatchinskiy

Rayon.

Economic: Truck farming, dairying.

Krasnoostrov-

skiy

60-18 N; 28-40 E.

Population: 3,000 (1959 est.).

Administration: Urban settlement located in Vyborgskiy

Rayon.

Economic: Fishing center; fishing kolkhoz, fish

combine.

Educational: Merchant marine academy.

59-43 N; 30-06 E. <u>Mozhayskiy</u>

<u>Population</u>: 3,000 (1959 est.).

Administration: Urban settlement located in Lomonosov-

skiy Rayon.

Economic: Truck farming; dairying.

59-23 N; 39-20 E. Nikolskiy

Population: 3,000 (1959 est.).

Administration: Urban settlement located in Podporozh-

skiy Rayon.

Economic: Lumbering.

Rakhya

60-05 N; 30-50 E. Population: 3,000 (1959 est.).

Administration: Urban settlement located in Vsevolozh-

skiy Rayon.

Economic: Peat-extracting center.

60-28 N; 32-53 E. Sviritsa

Population: 3,000 (1959 est.).

Administration: Urban settlement located in Novoladozh-

skiy Rayon.

Transportation: Port facilities on the Pasha River at

its confluence with the Svir River.

Economic: Ship-repair shops, metalworks.

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Torkovichi

58-51 N; 30-21 E.

Population: 3,000 (1959 est.).

Administration: Urban settlement located in Oredezhskiy

Rayon.

Economic: Glass manufacturing center.

Bolshaya Izhora

59-56 N; 29-31 E.

Population: 2,000 (1959 est.).

Administration: Urban settlement located in Lomonosov-

skiy Rayon.

Economic: Brickworks.

Dunay

59-58 N; 30-58 E.

Population: 2,000 (1959 est.).

Administration: Urban settlement located in Vsevolozh-

skiy Rayon.

Economic: Peat beds nearby; paper milling.

Fornosovo

59-35 N; 30-35 E.

Population: 2,000 (1959 est.).

Administration: Urban settlement located in Tosnenskiy

Rayon.

Economic: Truck farming.

NOVGORODSKAYA OBLAST

Novgorod

58-31 N; 31-17 E.

Population: 51,000 (1959 est.).

Administration: Capital of Novgorodskaya Oblast; city of oblast subordination; Oblast Committee of Communist Party; Oblast Executive Committee; MVD Department of Local Anti-Air Defense; Oblast Society for Cooperation with Army, Air Force and Navy (DOSAAF); Oblast Red Cross Society.

Airfields: One Class 5 (jnt.).

Transportation: October Railroad System; rail junction; steam engine house; port facilities on the Volkhov

River.

Economic: Ship-repairing, woodworking, food processing; railroad servicing enterprises, flour milling, meat packing, distilling; tile plant, radio parts plant, motor vehicle rapair plant, tractor repair plant, reinforced concrete plant, vodka distillery, mixed fodder plant, macaroni factory, sawmill, brickworks, manufacture of matches, porcelain, liquid fuels storage (nonrefinery).

Educational: Pedagogical institute.

Borovichi

58-23 N; 33-54 E.

Population: 48,000 (1959 est.).

Administration: City of oblast subordination, center of Borovichskiy Rayon.

Airfields: One Class 4 (jnt.).

Transportation: October Railroad System; rail-spur

terminus.

Economic: Largest industrial center in Novgorodskaya
Oblast: clay-processing center; metalworking, paper
and lumber processing, textile manufacturing, ceramics
factory, cotton-spinning plant, paper plant, timberprocessing plant, mechanical brick plant, distillery,

Borovichi (Contd.)

knitted-wear factory, leather footwear factory, cement plant, aluminum plant, machine plant, saw-

mill; mining of lignite.

Educational: Metallurgical-ceramics tekhnikum, roadmechanization tekhnikum, teachers' school, school for medical aides and midwives.

Staraya Russa

57-59 N; 31-22 E.

Population: 36,000 (1959 est.).

Administration: City of oblast subordination, center

of Starorusskiy Rayon.

Airfields: One Class 5 (mil.).

Transportation: October Railroad System; steam engine

house; river port facilities. Economic: Woodworking, veneering, brickyard, sawmill, tile manufacturing, agricultural-machinery shop,

flour mill, ammunition plant; gypsum and salt deposits

nearby.

Malaya Vishera

58-51 N; 32-14 E.

Population: 16,000 (1959 est.).

Administration: Town of rayon subordination; center of

Malovisherskiy Rayon.

Transportation: October Railroad System; turnaround point; steam engine house, railroad car repair shop. Economic: Railroad-servicing enterprises, glass and

brick plant, sewing machine factory.

Parakhino-

Poddubye

58-25 N; 33-17 E.

Population: 15,000 (1959 est.).

Administration: Urban settlement located in Okulovskiy

Economic: Paper-milling center.

Chudovo

59-10 N; 31-39 E.

Population: 9,000 (1959 est.).

Administration: Town of rayon subordination; center of

Chudovskiy Rayon.

Transportation: October Railroad System; rail junction;

turnaround point.

Economic: Match-manufacturing center; sawmilling, glass factory, brickworks, cement mill, metalworks, shoe

factory, ammunition plant; shale deposits.

Kresttsy

58-15 N: 32-32 E.

Population: 9,000 (1959 est.).

Administration: Urban settlement; center of Krestetskiy

Transportation: October Railroad System; rail-spur

terminus.

Economic: Wood-processing center; sawmill, woodworking

plants.

Pestovo

58-36 N; 35-48 E.

Population: 9,000 (1959 est.).

Administration: Urban settlement; center of Pestovskiy

Rayon.

Economic: Lumber center; sawmilling, lumber combine, flax processing, juice extracting, automobile-servicing

plant, sewing factory.

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Soltsy

58-07 N; 30-19 E.

Population: 9,000 (1959 est.).

Administration: Town of rayon subordination; center of

Soletskiy Rayon.

Military: Special weapons storage site (Target 0153-

0929).

Airfields: One Class 1 (mil.)

Economic: Lumber center; sawmilling, woodworking, paper

mill, flax processing; brickyard.

Okulovka

58-23 N; 33-18 E.

Population: 8,000 (1959 est.).

Administration: Urban settlement; center of Okulovskiy

Transportation: October Railroad System; rail junction.

Economic: Railroad-servicing enterprises; garment

factory, embroidery factories, gypsum and lime process-

ing.

Tesovo-Netyl-

skiy

58-57 N; 31-05 E.

Population: 8,000 (1959 est.).

Administration: Urban settlement located in Novgorod-

skiy Rayon.

Economic: Peat-processing center; construction-materials

plants.

Valday

57-59 N; 33-15 E.

Population: 6,000 (1959 est.).

Administration: Town of rayon subordination; center of

Valdayskiy Rayon.

Economic: Woodworking; furniture factory, embroidery

plant, brickworks, fruit processing, sawmill. Educational: Pedagogical school, nursing school.

Kulotino

58-27 N; 33-22 E.

Population: 5,000 (1959 est.).

Administration: Urban settlement; center of Okulovskiy

Rayon.

Economic: Flax processing, linen mills.

Educational: Agricultural mechanization tekhnikum.

Uglovka

58-14 N; 33-31 E.

Population: 5,000 (1959 est.).

Administration: Urban settlement located in Okulovskiy R. Transportation: October Railroad System; rail junction. Economic: Limestone combine, gravel quarry, brickworks,

gypsum processing, peat enterprises, dairy.

Bolshaya

Vishera

58-55 N; 32-05 E.

Population: 4,000 (1959 est.).

Administration: Urban settlement in Malovisherskiy

Rayon.

Economic: Glass manufacturing center.

Parfino

58-00 N; 31-38 E.

Population: 4,000 (1959 est.).

Administration: Urban settlement located in Starorusskiy

Rayon.

Economic: Lumber-processing center; veneering.

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Proletariy 58-26 N; 31-42 E.

Population: 4,000 (1959 est.).

Administration: Urban settlement; center of Mstinskiy

Rayon.

Economic: Ceramics plant.

Zarubino 58-42 N; 33-30 E.

Population: 4,000 (1959 est.).

Administration: Urban settlement located in Lyubytinskiy

Rayon.

Economic: Refractory clay extraction center; mechanized

mining enterprises, lignite deposits.

Krasnofar-

formyy 59-08 N; 31-51 E.

Population: 3,000 (1959 est.).

Administration: Urban settlement located in Chudovskiy

Rayon.

Transportation: Port facilities on Volkhov River.

Economic: Porcelain manufacturing.

Velgiya 58-23 N; 33-58 E.

Population: 3,000 (1959 est.).

Administration: Urban settlement subordinate to Boro-

vichi City Executive Committee.

Economic: Paper milling, spinning mill, metalworking

enterprise.

Khvoynaya

58-54 N; 34-31 E.

Population: 2,000 (1959 est.).

Administration: Urban settlement; center of Khwoynin-

skiy Rayon.

Airfields: One Class 5 (mil.).

Economic: Railroad servicing enterprises; metalworking.

Komarovo

58-39 N; 33-27 E.

Population: 2,000 (1959 est.).

Administration: Urban settlement located in Lyubytin-

skiy Rayon.

Economic: Lignite mining in the area.

Educational: Agricultural mechanization school.

Krechevitsy

58-37 N; 31-24 E.

Population: 2,000 (1959 est.).

Administration: Urban settlement located in Novgorodskiy

Rayon.

Airfields: One Class 2 (mil.).

Transportation: Minor river port facilities.

Economic: Extraction and production of building mate-

rials.

PSKOVSKAYA OBLAST

Pskov

57-50 N: 28-20 E.

Population: 71,000 (1959 est.).

Administration: Capital of Pskovskaya Oblast; city of oblast subordination; Oblast Committee of Communist Party; Oblast Executive Committee; MVD Department of Local Anti-Air Defense; Oblast Society for Cooperation with Army, Air Force and Navy (DOSAAF); Oblast Red

Cross Society.

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Pskov (Contd.)

Military: Headquarters, 76th (Airborne?) Guards Rifle

Airfields: One Class 2 (jnt.).

<u>Transportation</u>: Division Headquarters, October Railroad System; large rail junction; engine depot, steam engine house; river port facilities.

Economic: Industrial center of Pskovskaya Oblast;

production of flax-processing machines, flax-processing industry, flax-linen combine, food processing, poultry combine, grain mills, bread combine, fish cannery, meat combine, distillery, brewery, metal-working industry, metallist works, motor repair and auto repair plants, railroad servicing enterprises, garment industry, garment and footwear plants, woodworking plant, asphalt and concrete plant, binder-twine plant, brickyard, lime plant, peat-processing plant, boatyard, liquid fuels storage (nonrefinery).

Educational: Pedagogical institute, civil construction tekhnikum, agricultural tekhnikum.

Velikiye Luki

56-20 N; 30-32 E.

Population: 55,000 (1959 est.).

Administration: City of oblast subordination located in Pskovskaya Oblast (until October 1957 center of Velikolukskaya Oblast).

Airfields: One Class 4 (jnt.).

Transportation: Division Headquarters, Kalinin Railroad System; large rail junction; engine depot, steam engine house, railroad car repair shop.

Economic: Construction-materials industry (cement and lime deposits nearby), 2 brickworks; lumber industry, match factory, food-processing industry, meat combine, mechanized foundry.

Educational: Pedagogical institute, railroad tekhnikum.

Nevel

56-01 N; 29-59 E.

Population: 28,000 (1959 est.).

Administration: Town of rayon subordination; center of Nevelskiy Rayon.

Transportation: Kalinin Railroad System; rail junction;
 turnaround point.

Economic: Flax-processing plant, dairy products plant, juice-extracting plant, 2 brickworks.

Educational: Teachers' school, school for medical aides.

Ostrov

57-21 N; 28-22 E.

Population: 14,000 (1959 est.).

Administration: Town of rayon subordination; center of Ostrovskiy Rayon.

<u>Military:</u> Special weapons storage Gorodhovka Airfield (Target 0153-0941).

Airfields: One Class 1 (mil.).

Economic: Flax processing, brickworks, dairying, poultry combine, liquid fuel storage (nonrefinery).

<u>Dno</u>

57-50 N; 29-59 E.

Population: 10,000 (1959 est.).

Administration: Town of rayon subordination; center of

Dnovskiy Rayon.

Transportation: Division Headquarters, October Railroad System; major rail junction; engine depot, steam engine house, railroad car repair shop.

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Ontd.)

Economic: Railroad-servicing enterprises.

Gdov

58-44 N: 27-50 E.

Population: 10,000 (1959 est.).

Administration: Town of rayon subordination; center of

Gdovskiy Rayon.

Airfield: One Class 5 (mil.).

Transportation: River port facilities.

Economic: Fishing and lumbering center; fish canning plant, sawmills, woodworking, basket weaving, brick-

yard, shale extraction nearby.

Opochka

56-50 N; 28-40 E.

Population: 10,000 (1959 est.).

Administration: Town of rayon subordination; center of

Opochetskiy Rayon.

Economic: Flax-processing industry; food processing;

woodworking.

Educational: Teachers' school.

Novosokolniki

56-26 N; 30-05 E.

Population: 9,000 (1959 est.).

Administration: Town of rayon subordination; center of

Novosokolnicheskiy Rayon.

Transportation: Kalinin Railroad System; rail junction;

steam engine house.

Economic: Railroad-servicing enterprises; food process-

ing, poultry-incubator station, brickworks.

Porkhov

57-46 N; 29-34 E.

Population: 8,000 (1959 est.).

Administration: Town of rayon subordination; center of

Porkhovskiy Rayon.

Economic: Flax processing; dairy, poultry-incubator

station. Peat extraction nearby.

Sebezh

56-17 N; 28-29 E.

Population: 8,000 (1959 est.).

Administration: Town of rayon subordination; center of

Sebezhskiy Rayon.

Economic: Peat-extraction plant, building materials enterprise, food processing, cloth-weaving plant,

boat factory.

Educational: Agricultural teckhnikum, agricultural

construction tekhnikum.

Loknya

56-53 N; 30-10 E.

Population: 6,000.

Administration: Urban settlement; center of Loknyanskiy

Rayon.

Economic: Agricultural equipment repair shop, juiceextracting plant, cheese-manufacturing plant, sawmill,

poultry-incubator station.

Pechory

57-48 N; 27-36 E.

Population: 5,000 (1959 est.).

Administration: Town of rayon subordination; center of

Pechorskiy Rayon.

Military: Headquarters, 2nd Guards Tank Div.

Transportation: Brick-tile plant; flax processing.

Pechory Educational: Teachers' school, school for medical aides and midwives, school for veterinarians.

<u>Idritsa</u> 56-25 N; 28-55 E.

Population: 4,000 (1959 est.).

Administration: Urban settlement; center of Idritskiy Rayon.

Economic: Woodworking combine, brick-tile plant, flaxprocessing plant.

Kholm 57-10 N; 31-10 E.

Population: 4,000 (1959 est.).

Administration: Town of rayon subordination; center of Kholmskiy Rayon.

Economic: Brickworks.

Pustoshka 56-19 N; 29-22 E.

Population: 4,000 (1959 est.).

Administration: Town of rayon subordination; center of

Pustoshkinskiy Rayon.

Economic: Flax processing, sawmilling, brickworks.

Novorzhev 57-02 N; 29-21 E.

Population: 3,000 (1959 est.).

Administration: Town of rayon subordination; center of

Novorzhevskiy Rayon.

Economic: Flax processing, butter plant.

Pytalovo 57-03 N; 27-52 E.

Population: 3,000 (1959 est.).

Administration: Town of rayon subordination; center of

Pytalovskiy Rayon.

Transportation: Latvian Railroad System; rail junction

(Abrene).

Economic: Flax growing area.



