Hurricane Katrina was a late @-@ forming tropical cyclone that impacted portions of the Greater Antilles and Bahamas in November 1981 . The twenty @-@ first tropical cyclone , eleventh named storm , and seventh hurricane of the 1981 Atlantic hurricane season , Katrina developed from an area of cloudiness in the western Caribbean Sea early on November 3 . The initial tropical depression deepened slowly , and was upgraded to Tropical Storm Katrina on November 5 . About six hours later , Katrina peaked with sustained winds of 85 mph ( 140 km / h ) . The storm made landfall along the south coast of Camagüey Province in Cuba early on November 6 . Katrina quickly weakened to a tropical storm , before emerging into the Atlantic Ocean hours later . The system then accelerated northeastward and crossed the Bahamas late on November 6 . Katrina dissipated late on November 7 , shortly before merging with a frontal system .

On Grand Cayman , a waterspout ripped out a grape tree and slammed it into the Brac Reef Hotel 's bar . Heavy rainfall was observed on Cuba , peaking at 15 @.@ 74 inches ( 400 mm ) . As a result , Cuba experienced flash flooding in mountainous areas as Katrina moved across the country . In southern Camagüey Province , several bridges and railroads were reportedly washed out . Two sugar mills suffered damage . An estimated 4 @,@ 641 homes suffered impact , 39 of which were destroyed . In addition , approximately 80 % of sugar cane crops were damaged . Two people drowned in Cuba while attempting to cross a swollen river in Camagüey Province . The Bahamas received up to 14 in ( 360 mm ) of rain , causing flood damage to watermelon , tomato and corn crops , particularly on Long Island .

## = = Meteorological history = =

On November 1 , an area of disturbed weather ? a mass of cloudiness and thunderstorms ? developed over the western Caribbean Sea . Subsequently , a low pressure area began to form . The system was designated a tropical depression early on November 3 , while located about 150 miles ( 240 km ) to the south of the Cayman Islands . Operationally , the National Hurricane Center began issuing advisories on the tropical depression at 2200 UTC on November 3 . In the initial advisory , it was noted that the depression would slowly strengthen , but reach tropical storm status within 24 hours due to " strong " convection . The depression remained disorganized through early on November 4 , with satellite imagery and weather stations in the Caribbean Sea region indicating no intensification . However , only a few hours later , the depression strengthened into Tropical Storm Katrina , while drifting northward .

Continuing to strengthen , Katrina slowly recurved north @-@ northeastward and eventually to the northeast . The National Hurricane Center operationally classified Katrina as a tropical depression until 1600 UTC on November 4 , after a reconnaissance aircraft flight reported tropical storm force winds . At 0600 UTC on November 5 , the storm strengthened into a Category 1 hurricane on the Saffir ? Simpson hurricane wind scale . Later that same day , Katrina attained its peak intensity after another reconnaissance aircraft flight reported a minimum barometric pressure of 980 mbar ( 29 inHg ) , and observed maximum sustained winds of about 85 mph ( 140 km / h ) on the surface . However , Katrina weakened slightly while approaching Cuba . Early on November 6 , the storm made landfall in Camagüey Province with winds of 75 mph ( 120 km / h ) . Shortly after moving inland , the system weakened to a tropical storm . A deepening trough offshore the East Coast of the United States caused Katrina to accelerate east @-@ northeastward . By 1330 UTC on November 6 , the storm emerged into the Atlantic Ocean . Katrina slowly weakened while crossing through the central Bahamas later that day . After a reconnaissance aircraft flight failed to locate a closed circulation , the system dissipated late on November 7 , while located about 380 miles ( 610 km ) south @-@ southeast of Bermuda .

## = = Preparations and impact = =

In anticipation of Katrina, 150 @,@ 000 people and 120 @,@ 000 head of cattle in central Cuba

were evacuated, according to a broadcast by Havana radio. As a result, Cuban Civil Defense officers issued a storm alert for five provinces. A hurricane watch was declared for the central and eastern Bahamas. Along the southeast coast of Florida, small craft were advised to remain close to port. However, the storm was not expected to, and did not, pose a threat to the United States.

Throughout the Cayman Islands , Katrina dropped up to 12 inches ( 300 mm ) of precipitation . In Grand Cayman , a waterspout ripped out a grape tree and slammed it into the Brac Reef Hotel 's Bar . The highest observed 24 @-@ hour precipitation total in Cuba was 13 @.@ 03 inches ( 331 mm ) , while rainfall in the nation peaked at 15 @.@ 74 inches ( 400 mm ) . As a result , Cuba experienced flash flooding in mountainous areas as Katrina moved across the country . In southern Camagüey Province , a number of bridges and railroads were washed out . Two sugar mills suffered damage . About 4 @,@ 641 homes suffered impact , 39 of which were destroyed . In addition , an estimated 80 % of sugar cane crops were damaged . Two people drowned in Cuba while attempting to cross a swollen river in Camagüey Province . The Bahamas received up to 14 in ( 360 mm ) of rain . Although no deaths or injuries were reported there , heavy rains in the central islands caused flood damage to watermelon , tomato and corn crops on Long Island . Bad weather from Hurricane Katrina caused the cancellation of the 15th running of the Benson and Hedges Gold Cup Race .

## = ?irm?nai =

?irm?nai ( pronounced : [ ?ir?mu?n?i ] ; Polish : ?yrmuny ; Russian : ????? ? ??? ) is the most populous administrative division ( elderate ) in Vilnius . It is also a neighbourhood in the Lithuanian capital city Vilnius , encompassing the city district of the same name , built in the 1960s .

?irm?nai 's history has been traced to the late 14th century , when a Lithuanian fishing village was founded across the River Neris from Vilnius 'Old Town . Several historic sites in ?irm?nai are internationally significant ; it is the home of Lithuania 's largest Jewish cemetery , as well as the location of mass graves of soldiers belonging to Napoleon 's Grande Armée and victims of the NKGB 's and MGB 's executions after World War II . Tuskul?nai Manor , built in 1825 , and the surrounding Peace Park are important historical and cultural attractions in Vilnius .

The area was given the name ?irm?nai during the early 1960s , when it became the site of an award @-@ winning residential construction project ; it was the first city district in the Lithuanian SSR to be constructed applying urban planning concepts established in the USSR at the time . The massive Palace of Concerts and Sports and ?algiris Stadium are other relics of ?irm?nai 's Soviet history . ?irm?nai was important to the industrial sector in the USSR ; since that time , this function has been replaced or supplanted by newer businesses , including some of Lithuania 's leading companies .

?irm?nai has undergone major renovation and development in the 21st century . ?iaur?s miestelis ( "North Town ") is an area of ?irm?nai that has rapidly evolved into one of the key business and residential districts of the city . This quarter was used by a number of regimes as a military garrison , and internationally significant historical findings have been made in the area .

# = = Geography = =

The ?irm?nai elderate occupies 5 @.@ 7 km² or 1 @.@ 4 % of the total area of the municipality of Vilnius according to data used for the 2001 census . ?irm?nai is located north of central Vilnius , along the western bank of the River Neris , on a flat plain which rises to the north . The elderate extends for about 4 @.@ 4 kilometres from north to south , and is about 1 @.@ 5 kilometres across at its widest point . The southernmost point of the ?irm?nai elderate is only some 450 metres from Vilnius ' Cathedral Square , in the centre of the city . ?irm?nai is bordered by the elderates of Verkiai in the north and ?nipi?k?s in the west , and is separated from Vilnius ' Old Town and Antakalnis by the Neris . ?irm?nai 's western boundary is defined by the following streets ( from north to south ) : Verki? , ?valg? , Kalvarij? , ?algirio , and Rinktin?s . The River Neris serves as ?irm?nai 's northern , eastern and southern boundary . ?irm?n? Street is the district 's main artery .

Despite the proximity of the city centre, the ?irm?nai bank of the River Neris is covered with a strip of dense deciduous forest that begins at the ?irm?nai Bridge and continues upstream (northeasterly). The forested strip is largely uninterrupted, with gaps near bridges. At the approximate centrepoint of the ?irm?nai shoreline, the forest surrounds a backwater, which had been used to park disused passenger ferries. The forest 's northernmost section is part of a botanical nature reserve within Verkiai Regional Park.

The ?irm?nai bank of the River Neris , from a point near ?irm?nai Bridge and continuing downstream , was stabilised during the 1980s with a steeply @-@ sloped concrete net @-@ like structure which includes patches of grass between the " webbing " of the net ; the lower part of the fortification is a concrete tiled walkway , ending just over 4 kilometres downstream , beyond Liubartas Bridge in ?v?rynas . The walkway is used extensively by walkers , joggers , and cyclists , as well as providing seating for anglers . Construction vehicles sometimes use it to reach work areas . The walkway is submerged during the river floods , mostly in springtime .

= = Demographics = =

= = = Ethnicity = = =

As of the census taken in April 2001 , the ethnic makeup of ?irm?nai was 59 @.@ 2 % Lithuanian , 16 @.@ 8 % Russian ( the third highest percentage among Vilnius ' elderates , behind Naujoji Vilnia and Naujininkai ) , 14 @.@ 4 % Poles , 3 @.@ 8 % Belarusian , 1 @.@ 7 % Ukrainian , 0 @.@ 8 % Jewish , 0 @.@ 2 % Tatar , 0 @.@ 1 % Latvian , 0 @.@ 1 % Armenian , and 2 @.@ 9 % other or unspecified ethnicity .

= = = Population = = =

According to the 2001 census , ?irm?nai was the most populous elderate in Vilnius ( 47 @, @ 410 residents , comprising 8 @.@ 7 % of Vilnius ' total population ) and the third most populous in Lithuania after ?ilainiai and Dainava , Kaunas . The population density was 8 @, @ 317 @.@ 5 / km  $^2$  . According to the census , there were 21 @, @ 363 private households in the ?irm?nai elderate , making for an average household size of about 2 @.@ 2 persons . The population of ?irm?nai has been rapidly increasing , largely due to construction of residential buildings in the ?iaur?s miestelis section of the elderate . A former elder of ?irm?nai estimated its 2002 population to be about 60 @,@ 000 residents ? an increase of about 13 @,@ 000 over the 2001 census figure . This rapid growth has placed a strain on city services .

= = = Age cohorts = = =

?irm?nai is occasionally described as a "borough of elderly people " or even a "borough of elderly women " . There is a certain statistical basis to the claim : according to the data of the April 2001 census , only about 43 @.@ 5 % of ?irm?nai 's population were male , the second lowest percentage in Vilnius , after ?v?rynas ( 43 @.@ 1 % ) ; 27 @.@ 4 % of the population ( 33 @.@ 2 % of women and 19 @.@ 9 % of men ) were of legal retirement age , which was 57 @.@ 5 years for women and 61 @.@ 5 years for men at the time . This is the highest percentage in Vilnius ; accordingly , ?irm?nai had the lowest percentage of residents that were statistically of working age ( defined as over age 15 and up to the retirement age ) in Vilnius , only 56 @.@ 4 % in total : 52 @.@ 8 % of women and 61 @.@ 1 % of men .

The heavy proportion of elderly persons in the district may be attributed to the settled way of life of those residents who arrived during the building boom of the 1960s: the children of these residents moved elsewhere to live, leaving their parents in the old dwelling. The skewed male? female ratio is probably an artifact of the differential between male and female lifespans in Lithuania ( male average lifespan in Lithuania was 66 years in 2004, as against 78 for females), according to the

World Health Organization .

At the time of the 2001 census , persons aged between 0 and 15 years comprised 16 @.@ 1 % of ?irm?nai 's population , the second lowest percentage among Vilnius 'elderates , slightly higher than Vir?uli?k?s at 15 @.@ 5 % . However , it is likely that the average age of ?irm?nai 's residents has decreased since the last census , and will continue to decrease , as a result of the active construction of new dwellings , which are acquired primarily by younger people . As housing prices rise , retirees are motivated to sell their apartments with the goal of acquiring cheaper housing elsewhere with funds to spare .

### = = = Crime statistics = = =

In 2005 , 2 @,@ 317 crimes were registered in the ?irm?nai elderate . This is the third highest figure among Vilnius ' elderates , behind the Old Town and Naujamiestis . Using the population data of the latest available census ( 2001 ) , this would amount to about 48 @.@ 9 crimes per 1 @,@ 000 residents per year ( only the eighth highest figure , due to the elderate 's large population ; Vilnius ' total crime rate , using the same population data , would be about 51 crimes per 1 @,@ 000 residents ) . In terms of crime density , 406 @.@ 5 crimes per 1 square kilometre were registered ( the fourth highest figure , behind the Old Town , Naujamiestis and ?nipi?k?s ; Vilnius ' total crime density , using the same population data , would be about 70 @.@ 4 ) .

However, thanks largely to the crime prevention programme Saugus miestas ( " Safe City "), crime rates in ?irm?nai, as in all other elderates of Vilnius, are declining. For instance, 886 crimes were registered in ?irm?nai during the first four months of 2005, versus 672 during the same period of 2006, a decline of about 24 %. If this trend continues, ?irm?nai 's crime rate for 2006 would decrease to about 37 @.@ 2 crimes per 1 @,@ 000 residents.

The most frequently registered crimes during the first four months of 2006 were: theft (335 instances, including 19 car thefts, constituting about 50 % of the total number of crimes); rape (259 instances or about 38 @.@ 5 % of the total); robbery (44 instances or about 6 @.@ 5 %); and bodily injury (20 instances or about 3 %). Percentage data may overlap as one criminal act may have several features, which are registered separately, but the total number of crimes is calculated per incident.

### = = History = =

The elderate of ?irm?nai embraces three historical suburbs of Vilnius : ?vejai , Tuskul?nai and ?iaur?s miestelis . Fishing village ?vejai dating to the 14th century included the only glass factory in the 16th century Lithuania , as well as the largest Jewish cemetery . It became an integral part of Vilnius in the 16th century . The area south of ?vejai became known after the name of the Tusculanum Manor . Manor itself was a property of noble families and officials , and is the oldest building in ?irm?nai . In the 19th century , a military garrison was established in the present @-@ day ?iaur?s miestelis , which was used by Russian , French and Polish armies . These territories were consolidated into Vilnius city during the period of rapid growth that occurred in the 1950s and 1960s . The Tuskul?nai Manor was used as the KGB officers ' apartments back then . In the last years , a housing renovation program was launched in ?irm?nai . Military structures in ?iaur?s miestelis of a historical value have been preserved and restored . ?iaur?s miestelis became one of the most sought ? after residential and commercial areas of Vilnius .

## = = = 14th ? 19th centuries = = = =

?irm?nai 's southernmost section , which lies on the bank of the River Neris opposite the Vilnius Castle Complex , was part of the settlement known as ?vejai ; another part of that settlement is now located within the elderate of ?nipi?k?s . According to archaeological surveys from 2005 , a fishing village may have been located here as early as the late 14th century , giving the area its name , literally , Fishermen ; it was later settled by craftsmen and housed the Orthodox Church of St

Barbara . During the 16th century , the only glass factory in the Grand Duchy of Lithuania was located in the suburb of ?vejai . In 1563 , after the construction of the first bridge over the River Neris ( at the approximate location of today 's Mindaugas Bridge ) , the suburb of ?vejai became an integral part of the city of Vilnius . During Tsarist rule in the 19th century , the name of ?vejai was superseded by that of Piramont , originating from the small estate of Piramont in the area ( now Kalvarij? 1 ) . Piramontskij Alley can be seen in a 1904 map of Vilnius where today 's A. Juozapavi?iaus Street in the elderate of ?nipi?k?s is located , close to the boundary of ?irm?nai . The usage of Piramont as a placename gradually became limited to the southern part of ?vejai .

The heritage of ?vejai was retained in the name of ?vej? ( "Fishermen 's ") Street, which runs alongside the River Neris in southern ?nipi?k?s and ?irm?nai. However, the ?irm?nai section of this street was renamed Olimpie?i? ( "Olympians ") in 2000 to commemorate the achievements of Lithuanian Olympic athletes in the Sydney Olympics.

The largest and oldest Jewish cemetery in Lithuania , first mentioned in 1592 , was also located in ?vejai . It was known in the local Jewish community as Shnipishok . The Yiddish placename later became associated with the whole borough of ?nipi?k?s , now bordering ?irm?nai on the west . Although the cemetery was officially closed in 1830 and was subject to gradual deterioration , there were further interments . Vilna Gaon , as well as other famous Vilnian Jews , were interred in the cemetery .

During the years of the Polish @-@ Lithuanian Commonwealth , in the area on the right bank of the River Neris opposite the St. Peter and St. Paul 's Church in Antakalnis , a Royal Manor called Derevnictva ( Polish : Derewnictwo ) , was established in the mid @-@ 16th century by King Sigismund Augustus as an outpost of the Vilnius Castles . The manor was held by the kings Sigismund III Vasa and W?adys?aw IV Vasa , nobleman M. Pieg?owski , the Wo?owicz family , the Grand Hetman of Lithuania Micha? Kazimierz Pac , as well by the Tyzenhaus family after 1741 . In the mid @-@ 18th century , Lateran monks acquired the manor and named it Tusculanum , after the resort outside the ancient Roman city of Tusculum . ( see also : Villa Rufinella ) The surrounding forests were used as a game reserve and for sport fishing . Towards the end of the century , the manor was separated into the folwarks of Tuskul?nai , based on the core of the old royal manor , and Derevnictva .

Under the rule of the Russian Empire in the 19th century , the Tuskul?nai Manor was held by various noble families and high @-@ ranking state officials , including Governor General of Lithuanian? Vilna Governorate , Alexander Rimsky @-@ Korsakov . In the mid @-@ 19th century the main palace was transformed into a guesthouse that became a cultural center in Vilnius , often visited by Stanislaw Moniuszko and Józef Ignacy Kraszewski . The manor passed into the possession of Julija Safranovich after 1886 , and then was held by Olga Melentjeva and her noble family until World War II .

The area surrounding Tuskul?nai Manor was referred to as Tuskul?nai (Russian: Tuskuljany; Polish: Tuskulanum) until World War II. This area was also known as Losiovka or Losiuvka, colloquially named after A. Losev, colonel of Special Corps of Gendarmes and later general of the Russian Empire, who owned the folwark of Tuskul?nai in 1869. The placenames are associated primarily with individual wooden houses, built in the late 19th and early 20th centuries, some of which are still scattered among the apartment buildings.

A military garrison was built in the approximate location of the modern ?iaur?s miestelis ( " North Town " , that is , north of Old Vilnius ) section of ?irm?nai by the Russian Empire during the 19th century . This area went on to be used as a garrison by a number of armies : Napoleon 's Grande Armée in 1812 , Tsarist for the rest of the 19th century and in the beginning of the 20th century ( see : the 27th infantry division 's camp in the map of 1904 ) , the Bolsheviks during World War I , the Polish army in the inter @-@ war period , and the Red Army from the 1950s to 1992 .

= = = 20th century = = =

During the interwar period, when Vilnius was under Polish control, the southern part of ?vejai was known as Pióromont; the entire ?vejai area was referred to as Rybaki ( Polish for " Fishermen " );

modern ?iaur?s miestelis had been called Plac broni ( Polish for the " Military training ground " ); and the old placename of Derewnictwo, dating back to the times of the Polish @-@ Lithuanian Commonwealth, applied to the area north of Tuskul?nai Manor.

A map of Vilnius published in 1942, while the city was under Nazi rule, shows the northern part of ?irm?nai as Paneri?k?s, the middle section as Kareivi?k?s ( " place of soldiers ") and the southern part, close to the Tuskul?nai Manor, as Manti?k?s ( " a place named in honour of Mantas "). One of the streets in the area, Enriko Manto Street, referred to Herkus Mantas ( Herkus Monte ), a hero of the Great Prussian Uprising; today H. Manto Street is a short street in the ?nipi?k?s elderate ending at the boundary of ?irm?nai.

A Soviet military base was established in the current ?iaur?s miestelis section of ?irm?nai during the 1950s. The heavily wooded northernmost part of the elderate was thinly populated until the 1960s.

During the 1960s, ?irm?nai attracted the attention of urban planners; it became the first city district in the Lithuanian SSR to be constructed applying urban planning concepts established in the USSR at that time. Designed in 1962, the district consisted of three microdistricts - residential and industrial sections centred around public facilities and had been the largest residential area in the city.

The first microdistrict, or "?irm?nai I", which is district 's middle section, was built in 1962 ? 67 in accordance with a project by architect Birut? Kasperavi?ien?, who was avarded the USSR State Prize in 1968, together with architect Bronislovas Kr?minis and engineers ?muelis Liubeckis and Vaclovas Zubras; it was the first time this award had been presented to the designers of a large @-@ scale residential construction. The second microdistrict, "?irm?nai II", which is the southernmost of the three, was built in 1964 ? 68, its architect being Nijol? Chlomauskien?. And the third, the northernmost microdistrict, "?irm?nai III" designed by architect Laima Burneikien? was built in 1964 ? 69 in the site of the former village of Paneri?k?s. The city district was then named after the formerly Lithuanian village of ?irm?nai (Russian: Zhirmuny), now situated 16 kilometres from the Lithuania? Belarus border in the Voranauski District, Hrodna Province of Belarus. This village is where Karol Podczaszy?ski, an architect and designer of Tuskul?nai Manor, was born. Hence the future district 's major street ?irm?n? was named after the village as it is seen in the map of 1942 and gave its name to the entire district.

The new residential housing in the microdistrict consisted almost exclusively of five @-@ story prefabricated concrete block apartment buildings popularly known as khrushchyovkas . Three nine @-@ story high @-@ rise apartment buildings were built in 1969 , and several more were constructed later , as well as seven brick @-@ built twelve @-@ storeys . The apartment buildings were meant primarily to accommodate industrial workers who came to Vilnius from other regions of the Lithuanian SSR and from other Soviet Republics . They typify the Brutalist architecture of the era . The principles governing the design of the microdistrict were set forth in books by the University of Moscow planners , for instance in New Element of Populating . En Route to the New City published in the USSR in 1966 ( although the concept of the " new element " has been dated to 1959 ) ; the book was later published as The Ideal Communist City in the United States , United Kingdom and Italy . According to the book , the optimal apartment size was about 600 square feet ( 56 square metres ) , with one bathroom and two bedrooms . Single @-@ family homes were considered " too autonomous " .

The ancient Jewish cemetery in ?vejai stood in the way of the expansion . Many tombstones were destroyed in 1950 during the construction of ?algiris Stadium; the cemetery was completely demolished in 1955 in accordance with a decree issued by local authorities in 1948. The bodies of Vilna Gaon and several members of his immediate family were relocated, after receiving special permission from the Soviet authorities; this relocation has been the subject of historical controversy. The cemetery was the subject of an archaeological survey in the late 1990s. A memorial stone was placed in the southeastern portion of the former cemetery with an inscription in Yiddish and Lithuanian, stating that the cemetery was established there in 1478 (this dating is disputed).

An incident in ?irm?nai 's history that has been difficult to reconstruct occurred in 1975, when a pontoon bridge across the River Neris, that was customarily set up from spring to autumn,

collapsed due to the weight of a crowd returning from a concert in the Palace of Concerts and Sports . It was rumoured that the bridge supports were not fully connected at the time . There were witnessed fatalities involving drownings and crushing by the bridge structures . Public discussion of the disaster was restricted and the number of casualties remains unknown . The pontoon bridge was never re @-@ erected at the site; the Mindaugas Bridge now serves this need .

Tuskul?nai Manor had been nationalised in 1940 and was later used as KGB officers ' apartments and as a kindergarten . During excavations that took place between 1994 and 1996 in its territory , the remains of 706 bodies were found ; 40 were identified . The area had been used to hide the bodies of Lithuanian residents ? mostly resistance fighters against the Soviet occupation and Nazi collaborators ? who had been executed by the NKGB and MGB in the Vilnius ' KGB Palace between 1944 and 1947 but also those who died fighting Polish Armia Krajowa soldiers . The remains from the mass grave were placed in a columbarium built underground , beneath an artificial hill , and consecrated in 2004 .

In 2001, workers laying telephone line in ?iaur?s miestelis, near the former garrison, discovered a mass grave that was found to contain the bodies of about 2 @,@ 000 soldiers? the remnants of Napoleon 's Grande Armée as it retreated from Moscow. In December 1812, temperatures in Vilnius had sunk to? 30 ° C, and the frozen ground made proper burials impossible. The Grande Armée at that time comprised French, Portuguese, Italians, Germans, Austrians, Spaniards, and Croats, as well as Lithuanians and Poles. The bones have been intensively studied by forensic pathologists; DNA evidence showed that many of the deaths were caused by typhus. Most of the remains were re @-@ interred in Antakalnis Cemetery. Other findings included buttons stamped with Napoleon? s image, crucifixes, wedding rings, belt buckles, boots and pieces of French uniforms. Footage from the location has been used in the TV series Moments in Time produced by Discovery Channel and Meet the Ancestors by BBC. The archaeological surveys were partially sponsored by the producers.

The Red Army military base in ?irm?nai was abandoned in 1992, a few years after Lithuania 's independence from the Soviet Union; a grace period was granted in order to ensure the orderly resettlement of the soldiers and their families.

## = = = 21st century = = =

Due to the Soviet principles of urban planning , ?irm?nai , according to the 2001 census data , was among the three Vilnius elderates ( the other two being Karolini?k?s and Vir?uli?k?s ) with the lowest percentage of single @-@ family housing in the city ( 0 @.@ 1 % ) . Of the remaining residents , 0 @.@ 4 % owned a share of individual housing , 0 @.@ 7 % lived in hostels , and almost 99 % lived in apartments . The scarcity of lots means that the number of single @-@ family dwellings is not likely to increase ; a reverse process is taking place : old wooden houses are being demolished , making room for new residential and commercial constructions . As of 2007 , there were only a few modern single @-@ family houses in ?irm?nai .

?irm?nai 's housing, especially in its central sections, is in need of extensive renovation, due to wear and tear of its low or medium @-@ quality construction. A program to renew old apartment buildings (including the installation of better insulation) is ongoing in Vilnius, partially assisted by the Vilnius City Municipality; the first finished renovation project? a completely renewed 60 @-@ apartment building built in 1965? is located in ?irm?nai. The area is, in some ways, analogous to public housing districts in Chicago and London; although much of the housing was quickly and inexpensively erected in the 1960s, its proximity to downtown Vilnius, its transportation infrastructure, and its access to the River Neris account for its popularity. The principles of Soviet urban planning that led to its growth have converged with the modern concept of "Smart growth".

The ?iaur?s miestelis section of ?irm?nai is growing rapidly and in 2007 was one of Vilnius ' most sought @-@ after residential and commercial areas .

Many of the military structures that were built in the late 19th century in ?iaur?s miestelis have been preserved and restored. Meanwhile, much of the construction that was not deemed to be of permanent value, erected during the Soviet times, has been demolished, leaving room for new

streets and housing. The combination of military heritage sites and newer construction is a distinctive feature of ?iaur?s miestelis.

Reflecting its military history , numerous street names in and around ?iaur?s miestelis allude to military concepts , including Kareivi? ( " Soldiers " ) , Lak?n? ( " Pilots " ) , ?ygio ( " March " ) , Apkas? ( " Trenches " ) , Ulon? ( " Light Cavalry " ) . The new streets built in ?iaur?s miestelis during the beginning of the 21st century were named for prominent figures in Lithuanian military history : Povilas Luk?ys , Lithuanian army volunteer , the first to perish in the Independence Wars in 1919 with the Bolshevik forces , as well as Kazys Ladyga , Silvestras ?ukauskas , Jonas Galvydis @-@ Bikauskas , Vladas Nagevi?ius , and Jurgis Kubilius , prominent officers of the inter @-@ war Lithuanian Army , whose histories are not directly related to the area . On the contrary , these personalities distinguished themselves by opposing the Bolshevik and Polish armies that were historically garrisoned in ?iaur?s miestelis . The naming was suggested by the Ministry of Defence . There are more streets not far from ?iaur?s miestelis that bear military @-@ themed names : Raitinink? ( " Cavalrymen " ) , ?valg? ( " Scouts " ) and Rinktin?s ( " Platoon " ) .

An international dispute arose in the 2000s over construction near the Jewish cemetery, with organizations expressing concerns that gravesites could be disturbed.

#### = = Education = =

The educational institutions in ?irm?nai include three secondary schools , all Lithuanian @-@ language . Tuskul?nai Secondary School ( Lithuanian : Tuskul?n? vidurin? mokykla , formerly Vilnius ' Secondary School No. 31 ) had 1 @,@ 463 students in 2006 , which made it the fifth largest school in Vilnius . The school features advanced classes in the visual arts . St. Christopher 's Gymnasium ( Lithuanian : ?v . Kristoforo gimnazija , formerly Vilnius ' Secondary School No. 9 ) was the eighth largest in Vilnius with 1 @,@ 391 students in 2006 . ?irm?nai Gymnasium ( Lithuanian : ?irm?n? gimnazija , formerly Vilnius Secondary School No. 7 ) had 800 students in 2006 . The school was granted the title Gymnasium in 2000 ; it is home to the acclaimed brass band Septima , established in 1966 .

There are three elementary schools located in ?irm?nai : Antoni Wiwulski , Emilia Plater , and St. Christopher . ?ar?nas Mar?iulionis Basketball School and Vilnius Sports School offer physical education . The Vilnius School of Radioelectronics and Precision Mechanics ( Lithuanian : Vilniaus radioelektronikos ir tiksliosios mechanikos mokykla ) was established in 1965 to prepare workers for Vilma , a manufacturer of electrical products still operating in ?irm?nai . The Vilnius School of Tourism and Commerce ( Lithuanian : Vilniaus turizmo ir prekybos verslo mokykla ) offers certificates in retailing , basic bookkeeping , hotel and restaurant services , and other business areas . Vilnius Gija Youth School serves those students who have special needs and do not succeed in traditional classroom settings . ?irm?nai also has one of the three Children 's Foster Homes in Vilnius .

As of the census taken in April 2001, 26 @.@ 2 % of ?irm?nai 's residents aged 10 or older possessed a bachelor 's or higher degree.

= = Facilities = =

#### = = = Parks and museums = = =

Tuskul?nai Manor is ?irm?nai 's oldest extant architectural structure . The manor was built in 1825 , following a design by Karol Podczaszy?ski in the neoclassical style . It consists of the principal building ( the palace ) , an officina ( storage house ) , and several adjacent buildings , including a small eclectic chapel of St. Theresa located about 100 metres south of the principal building . The "Little White Manor " , also known as the villa of Franciszek Walicki , was built in 1866 further south from the manor , acquired by Walicki in 1928 , and reconstructed to serve as a summer residence . All of these structures have been restored by 2009 , and are a part of the 7 @.@ 5 @-@ hectare

Peace Park (Rimties parkas) that includes the Tuskul?nai Manor, hosting a museum of martyrology in Lithuania in the second half of the 20th century (a branch of the Lithuanian Museum of Genocide Victims), restored landscaping, as well as the columbarium.

A Museum of Computing was opened in 2001 in ?irm?nai by the Lithuanian software company Sintagma , showcasing the history of Lithuanian computing science and hardware production . It was based on a museum opened in 1985 by Sigma , one of the leading computer manufacturers in the former Soviet Union . The museum 's exhibits include EV @-@ 80 , the first Soviet vacuum tube computing machine manufactured by Sigma , and a copy of the IBM 604 .

Three of the 19 brick chapels of the Vilnius Stations of the Cross (Vilniaus Kalvarijos), part of Verkiai Regional Park, are located at the extreme northwestern corner of ?irm?nai, just within the elderate 's border. Once destroyed in 1963 and completely rebuilt, the three chapels, symbolizing the Mount of Olives and the Gardens of Gethsemane, are found only 20 meters away from the relatively busy Verki? Street, and about a hundred meters downhill from a group of Soviet multi @-@ storey apartment buildings.

The forested area along the banks of the River Neris in ?irm?nai and its walkways are a popular recreational destination for many Vilnians.

## = = = Governmental offices = = =

As a primarily residential area , ?irm?nai hosted only 7 @.@ 4 % of Vilnius ' public offices in 2003 . ?irm?nai is the location of the Personal Identity Documents Centre of Lithuania 's Ministry of the Interior which produces all of Lithuania 's identity cards , passports , and driver 's licenses , as well as residency permits . Issuance of residence permits is controlled by Vilnius City Migration Service , which is housed in ?irm?nai too . The State Tax Inspectorate has an office in ?iaur?s Miestelis , providing services to private as well as legal persons . There are also several medicine @-@ related institutions , such as the Ministry of Health 's State Public Health Service , the Vilnius city morgue . The Institute of Forensic Medicine of the Mykolas Romeris University was headquartered in ?iaur?s Miestelis as well . The Lithuanian National Olympic Committee , the Vilnius Department of the Lithuanian Labour Exchange at the Ministry of Social Security and Labour , the Honorary Vice @-@ Consulate of the Kingdom of Spain , and the National Examination Center , established by the Ministry of Education to organize centralized nationwide examinations of high school graduates , all have headquarters in ?irm?nai .

### = = = Sports and entertainment venues = = =

Several notable sports facilities are located in ?irm?nai , including ?algiris Stadium , Lithuania 's largest stadium , and Impuls Plus fitness club . Rowing practices take place on the River Neris ; there is a base of operation , as well as several piers , on the ?irm?nai bank of the river . One of Lithuania 's largest indoor public swimming pools was situated in ?irm?nai until the 1990s . Part of the annual international Vilnius Marathon course runs along the ?irm?nai bank of the River Neris .

The Vilnius Palace of Concerts and Sports ( Koncert? ir sporto r?mai ) , built in 1971 in the southernmost part of ?irm?nai in the middle of the former cemetery , is an example of Soviet Constructivism and Brutalist architecture , remarkable for its vessel @-@ like exterior . The Palace , once one of the architectonic icons of Soviet Vilnius , was , until the 1990s , a major venue for sporting events , especially local and international basketball matches , as well as concerts and shows . Its seating capacity is about 4 @,@ 400 . On 22 ? 23 October 1988 the building hosted the statutory meeting of S?j?dis , the Lithuanian political organization that led the struggle for Lithuanian independence ; on 14 ? 15 January 1991 , a public funeral for the victims of the January Events took place at the Palace . Later in the 1990s , the building was used as a temporary shopping mall where space was leased to small entrepreneurs for business exhibitions and fairs . In the 2000s developers announced plans to build multifunctional complexes , incorporating sports , business and residential structures , that would replace ?algiris Stadium and the Palace of Concerts and Sports ; the projects have been stalled due to the inclusion of the Palace into the list " Registry of Cultural

Values " in July 2006, and related litigation.

The Vilnius Palace of Culture, Entertainment and Sports (an example of Soviet functionalism built in 1980 as the Palace of Culture and Sports of the Ministry of Interior), hosts several amateur art clubs (choirs in particular), and is also used for indoor sports (wrestling, martial arts, artistic gymnastics, volleyball, basketball), as well as lawn tennis, including two clay courts.

Oskaras Kor?unovas Theatre has occupied the former Lietuvos Rytas Arena which was the home of Lithuania 's starring basketball team Lietuvos Rytas until the 2004 season , and was also used by the former women 's basketball team BC Teo . Along with the Vilnius Palace of Culture , Entertainment and Sports , it was used in 2006 as part of the set for 9 / 11 : The Twin Towers , a docudrama about the September 11 , 2001 attacks in New York City , a Dangerous Films production for BBC and Discovery Channel . ?kio banko teatro arena ( " ?kio Bankas Theater Arena " ) is now the venue of performances of Eimuntas Nekro?ius of Meno Fortas and An?elika Cholina Dance Theatre .

Southern ?irm?nai 's sporting connections are reflected in the names of the streets along the ?irm?nai side of the River Neris : Sporto ( "Sports ") and Olimpie?i? ( "Olympians "). The Palace of Students 'Technical Creative Work of the Republic is Lithuania 's largest facility for high school students 'after @-@ school activities of a technical nature, such as model building and go @-@ kart racing. The Grand Theater of Vilnius (Didysis Vilniaus teatras) is a small theater (its misnomer is intentional) that is formally based in ?iaur?s miestelis; it has no venue of its own and holds performances in other theaters.

A building close to the western border of the ?irm?nai elderate , an example of Socialist historicism built soon after the end of World War II , was the home of the T?vyn? ( " Motherland " ) Cinema until the early 1990s ; it has been hosting the New York musical theatre and club since 2004 . It is unclear whether this building will be demolished to make way for underground parking lots or saved by virtue of its inclusion into the Registry of Cultural Values .

#### = = = Commercial and industrial facilities = = =

1 @,@ 414 businesses, comprising 8 @.@ 7 % of all Vilnius ' businesses, were headquartered in the ?irm?nai elderate in 2003. Lithuania 's largest electricity distribution network operator, Ryt? skirstomieji tinklai, operates from ?irm?nai, as well as TELE2, one of Lithuania 's three mobile communications operators; Ogmios, one of Lithuania 's largest retailers and wholesalers of home appliances; and Vilpra, Lithuania 's largest dealer of heating equipment.

In 1992, the former prominent Lithuanian basketball player ?ar?nas Mar?iulionis and his business partners opened the ?ar?nas Hotel in ?irm?nai.

The Banginis and Rimi Hypermarket, located in ?iaur?s miestelis, are among Lithuania 's largest shopping centers. Vilniaus duona ( " The Bread of Vilnius " ), Lithuania 's largest baking company, operates one of its bakeries in ?irm?nai.

An abundance of automotive service facilities and car dealerships are located in the elderate , including some of the Lithuania 's largest Opel , SAAB , Chevrolet ( ?aibo ratas ) , and Nissan ( Raitas ) dealerships .

The northern part of ?irm?nai was an important part of the Lithuanian SSR 's industrial sector during the 1960s , 1970s , and 1980s . The Kuro aparat?ros gamykla ( Fuel Equipment Factory ) is now bankrupt ; Sigma , formerly one of the leading manufacturers of electronics and computer components in the Soviet Union , which contributed to the description of the Lithuanian SSR as " The Soviet Silicon Valley " , continues to operate at a minimum level ; and Vilma remains Lithuania 's largest manufacturer of electrical products .

## = = Transport = =

?irm?nai is well @-@ served by Vilnius ' bus and trolleybus transportation network . One of Vilnius ' trolleybus hubs is located in the northernmost part of ?irm?nai elderate , and Vilniaus Autobusai , Vilnius ' main bus operator , is headquartered and has its main depot in ?irm?nai . ?irm?nai suffers

from rush hour traffic jams. The street network in the district was primarily designed in the Soviet era for a much lower vehicle traffic.

?irm?nai is linked to the elderate of Antakalnis by three bridges over the River Neris: Valakampiai Bridge, the longest bridge in Vilnius, built in 1972; the ?ilas Bridge, built in 1999, and ?irm?nai Bridge, built in 1965. The Mindaugas Bridge was built in 2003 to link ?irm?nai with Vilnius! Old Town. Passenger ferry transport on the Neris was active until the 1990s, but is now limited to occasional chartered sightseeing tours from the Mindaugas Bridge to Valakampiai in summer.

For some time in the first half of the 20th century, a narrow @-@ gauge railway traversed ?irm?nai following the approximate course of the modern Minties Street; it crossed over the River Neris on a bridge located near the modern ?ilas Bridge, as can be seen in the 1942 map of Vilnius.