

**Local Government & Community Development Department**



## **Punjab Cities Program**

### **Gap Analysis**

of

**Municipal Services infrastructure & service delivery**

in

**Khanewal City**



**Punjab municipal Development Company**

## **Section-1 City Background**

### **1.1. District Status**

The origin of the name Khanewal is obscure. Khanewal Kohna, a small village which is now part of Khanewal city, is named after Khans of the Daha family settled in this area before 1890. The city of Khanewal gained its importance after the construction of Khanewal-Lodhran chord Railway track and Khanewal Shorkot Road Railway track when Khanewal railway station was established as a Railway junction.

National Highway from Karachi to Peshawar, running through the heart of the district and the city as well, has further increased its importance.

### **1.2. Location**

Khanewal is located at 30°-18' North and 71°-55' East with an altitude of 135 meters above mean sea level at a distance of 45 Km in North East of famous city of Multan. It is located on the main arterial highway N-5 of the country and hence connected to all cities of Pakistan through road and rail links.

### **1.3. The Climate**

The climate of the district Khanewal is hot and dry in summer and cold in winter. The summer season is lengthy which begins in April and continues till October for about seven months. The hottest months are May, June and July. The mean maximum and minimum temperatures during the period are 42 and 29 centigrade respectively. The winter is pleasant. The coldest months are December, January and February. During this period the mean maximum and mean minimum temperatures are 21 and 5 centigrade respectively. Day temperature in the summer is high but nights are comparatively cool. The hottest day temperature is recorded in the month of June. Most of the rain falls during monsoon season from July to September. Winter rain is very scarce. Annual rainfall is about 160 millimeters.

### **1.4. Demographic status**

The District Census Report for the Census 2017, has not been published by Government of Pakistan. However the provisional data available from this census shows the population of 248,248 persons for the city within municipal limits. A land scan process was done to estimate the population of entire inhabited areas of city in close approximation, which was found to be 283,829 persons in the year 2017 with an annual growth rate of 1.32 % and it is expected to rise to 323,600 persons in the year 2027. A large and thick inhabitation has developed outside the municipal limits of city and the municipal limits need to be extended.

### **1.5. Data collection**

The formats for the data collection about the municipal services were designed and sent to the Municipal Committee. After receipt of these formats, the city was visited to;

- 1) Verify and correct the data provided by the municipal committee.
- 2) Update the descriptive maps of all the services by consultation with MC staff & Public Health Engineering staff.
- 3) Identify the required improvements and extension of the municipal services infrastructure.
- 4) Identification of Public Private Partnership projects already executed
- 5) Identify the capacity of the key officers to undertake the PPP projects and collaborative projects with other government agencies and MCs
- 6) Public opinion surveys regarding the delivery of municipal services.

## **1.6. Situation analysis and Gap analysis**

Situation analysis of the existing municipal services infrastructure and the quality of service delivery was done. Gap analysis was done to identify the problems, bottlenecks and shortcomings in the infrastructure itself and its operation & maintenance for each municipal service along with the correction/updating of descriptive maps which has been described in the following sections.

## Section-2 Water supply system

---

### 2.1. Existing situation

Most of the area of the city is equipped with piped water supply system. However some of the areas are facing water shortage whereas some others have no water supply system and the inhabitants have developed their own water sources because the shallow as well as deep aquifers over here have chemically fresh water but the shallow aquifers are mostly contaminated and cannot be relied on for drinking purposes.

### Filtration plants

16 No's ultrafiltration plants and 2 No's RO plants have been installed in the city at various places for supply of potable water to the citizen and most of the residents are fetching drinking water from these filtration plants.

### 2.2. Water sources

In total 13 tubewells were originally installed in the city out of which only 7 tubewells are operational. The table given below shows the capacity of these tubewells and daily water production in the city from this water supply system.

SN	No. of tube wells	Capacity each (cusecs)	Total capacity (cusecs)	Working hours per day	Daily water production (mgd)	
					Present with 7.5 hours pumping	Possible with 14 hours pumping
1	5	1.5	7.5	7.5	1.265	2.36
2	4	1.0	4	7.5	0.675	1.26
<b>Total</b>	<b>9</b>	<b>-</b>	<b>11.5</b>	<b>-</b>	<b>1.940</b>	<b>3.62</b>
	Present population of the city				283,829	Persons
	Maximum possible water production per capita per day				6.83	Gallons

The average quantity of water per capita per day for the entire city is very low because of large population and limited production of water supply. Water production is needed to be enhanced for removing water shortage and covering the un-served areas.

### Closed tubewells

The tubewells installed at undermentioned location have been closed due to reduction in discharge and sand blowing;

Sr.No.	Location of Tube well	No's	Discharge (Cusec)
1	Thana ground	1	2.0
2	Tee-Chowk	1	1.5
		1	2.0
3	Nizamabad	1	2.0
4	PHED office	1	2.0
5	Colony No-2	1	1.5
<b>Total closed tube wells</b>		<b>6</b>	

These tube wells need replacement for elimination of water shortage in the city

### 2.3. Storage Capacity:

Storage has been constructed in the form of overhead reservoirs (OHRs). The status of the overhead storage is given below;

S.N.	Location	No. of OHRs	Capacity (gallons)	Repairs/ Replacements required
1	Central water works T-Chowk	1	50,000	Major Repairs
2	People Colony	1	50,000	-
3	Camp Colony	1	50,000	-
	<b>Total</b>		<b>150,000</b>	

### 2.4. Problems and gaps in the system

#### 2.4.1. Water shortage (shown in light yellow color in the map)

Acute water shortage area in whole water supply system is given in table below.

Basti Hann Shah	Block No 12,16	Block No 15	Ghareeb Abad	Colony No 3
Kamran Colony	Quaidabad	Kot Birbal	Usmanabad	

#### Reasons for water shortage

- The areas are congested and thick by population.
- Water production is much low as compared to the population of these areas.

#### 2.4.2. Un Served Areas (shown in light pink color in the map)

Under mentioned areas of the city have still not been provided with the facility of water supply.

1-Gulshan-E-Ali	2-Daka Chowk	3-Farukh Colony	4-Basti Zulfiqar	5-Mushtaq Colony
6-Fareed Abad	7-Ahmad Nagar	8-Basti Sarajai	9-Shadman Town	10-Khaleel Town
11-Green Town	12-Islam Pura	13-Colony No 3	14-Ameen Town	15-Jinnahabad
16-Payra Town	17-Chak No.168/10R	18-Railway Town	19-Mujahidabad	20-Fazal Town
21-Afzal Town	22-Allama Iqbal Town	23-Zahoorabad	24-Zahoorabad 2	25-Hamyatabad
26-Paki Bhaini	27-Rehman Town	28-Madina Colony	29-Khurram Pura	30-Gulsan Ali
31-Al Raheem Town	32-Nishat Town	33-Khokharabad	34-Malikabad	35-Chak No 88/10R
36-Tibba Abadi 88A/10R	37-Bhani Settlement Ch No.90/10R	38-Bakhtiryari Town	39-Kot Allah Singh	

#### 2.4.3. Areas with abandoned water supply system

There is no area in city with abandoned water supply system because all the areas previously served by the abandoned tubewells are being served by the remaining operational tubewells. However it has created water shortage in these areas.

## 2.5 Water supply hours and consumer connections

Water Supply hours				Consumer connections			
Morning	Midday	Evening	Total	Domestic	Commercial	Industrial	Total
3.5	2	2	7.5	1750	24	Nil	1774

## 2.6 Total coverage of the city

It is estimated that total present coverage of the city is approximately 40-45%.

## 2.7 Tariff structure

The consumer connections are not metered and hence water wastage should be predominant over here. The tariff comprises of flat rates not even levied according to the area slab of houses. The water rates are given below;

Domestic	Rs 40 pm
Commercial	Rs. 150 pm
Industrial	Not levied

## 2.8 Required rehabilitation of the supply system

Under mentioned components of the existing system need rehabilitation. Component wise details are given below

### 2.8.1 Tube wells

#### Repair & Replacements of pumping machinery for Tube wells

Type of Pump	Discharge each (cusec)	Replacement of tube wells*	Replacement of pumping units**	Repairs of pumping machinery***
Turbine Pumps	1.5	2	1	5
Turbine Pumps	1	4	3	2
Total		6	4	7

\* These tube wells were in the year 1990-91 years ago and are abandoned. Therefore they need replacement.

\*\*These pumping units were installed 25 years ago and have outlived their life. The repair is costly and the original efficiency cannot be achieved.

\*\*\*The repairs will include all electrical and mechanical items and PCC pump foundations along with painting of all the accessories.

### 2.8.2 Repair of Pump Houses:

Water works	Total Nos	Size (Ft.)	Type of repair
Tube wells	9	12'x12'	White washing, painting, Plastering & pointing

### 2.8.3 Repair of filtration plants

Undermentioned filtration plants need repair of certain components

S.N.	Type of plant	No of plants	Repairs required
1	Ultrafiltration plants	16	16
2	RO Plants	02	02
	<b>Total</b>	<b>18</b>	<b>18</b>

### 2.8.4 Distribution system:

55-46% of the city area is required to be equipped with new distribution system as these areas are unserved.

### 2.8.5 Repairs & replacement of other components

These components include;

- Hypo-chlorinators =9 Nos.
- Replacement of damage 6" dia. PVC pipe line.

### 2.8.6 Water wastage & Water management

Lot of water wastage is occurring in the water supply system in below given ways;

- a) Some consumer connections have no taps.
- b) Some consumers keep the taps open in all water supply hours although they do not need water.
- c) Most of the overhead tanks of the consumers have no float valve and when their tank is full, the water flows down to the drains continuously during the supply hours.

The water wastage causes excessive water production and high electricity consumption. It exerts a large pressure on the municipal budget. Large savings in the electricity bills and ultimately O&M cost, will be made by reducing the water wastage at the consumer ends. It will save lot of water and water shortage can be addressed by conservation of water being wasted at present. The best and efficient way to save water and reduce O&M cost is the *consumer metering*, by an ultimate reduction.

*Installation of consumer meters on 1774 Nos consumer connections is required.*

## 2.9 O&M Charges and revenue recovery

The operation & maintenance charges and the revenue recovered during the last four years is given below;

<b>Year</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>Total for five years</b>
O&M charges (million Rs)	13.105	16.376	17.25	17.081	17.55	<b>81.362</b>
Revenue recovery (million Rs)	1.214	1.54	1.25	1.15	0.85	<b>6.004</b>
Subsidy injected (million Rs)	11.89	14.84	16.00	15.93	16.7	<b>75.36</b>

The above mentioned data shows a very weak billing and recovery system of the water revenue which is required to be improved by capacity building of the recovery staff.

## **2.10 Manpower deployment**

<b>Slot</b>	<b>Sanctioned strength</b>	<b>Existing strength</b>	<b>Vacant post</b>	<b>Manpower on daily wages</b>	<b>Total man power deployed</b>
Tubewell operators	13	13	0	0	13
Chowkidars	10	0	10	0	0
Total	23	13	10	0	13

## **2.11 Service delivery**

- Water supply is operated for total 7.5 hours per day. The quantity of water being produced presently is very less for served areas because of deficit source capacity and short supply hours which are needed to be enhanced.
- 55 to 60% area of the city is un-served. The facility is required to be extended to these areas.
- None of the consumer connection is metered and it is recommended to meter all the consumer connections.
- MC should reduce the water wastage to conserve fresh water and to save the electricity cost being incurred on production of water and pumping the waste water from sewerage systems.



## Section-3 Sewerage system

---

### 3.1. Existing situation

#### 3.1.1. Coverage

- Khanewal city has extensive sewerage system but some of the areas, roads and streets are flooded with waste water because of the waste water outfall problem which is causing silting up of sewers discussed in the following paragraphs. The city also contains large un-served areas.
- The city is presently served with 6 disposals stations which are in working condition. Another sewerage scheme at north side of the city along Kabirwala road is under completion by PHE Department. After its completion the total number of disposal stations in the city will become seven.
- An outfall sewer has been laid along Jahanian Bypass road to eliminate the Disposal stations located at People Clony, Nizamabad and Malikabad by connecting their trunk sewers with the newly laid sewer discharging into the Jhanian Road disposal works from where the water is pumped into a force main of 32" dia GRP terminating into treatment plant. The water after treatment is used for broad irrigation, but presently water is being used by the farmers directly and the treatment plant is totally closed.

#### 3.1.2. Pumping / disposal stations

##### a) Details of pumping stations

The details of each pumping station is given below;

Location	Nos of collect tanks	Nos of pumps	Discharge each (cusecs)	Total discharge (cusecs)	Motor BHP	working status	Force main/S. Carrier			Ultimate disposal
							Size (inch)	Length (ft.)	Condition	
Tariq Abad	2	1	10	10	125	Yes	24"	3500	Poor	Treatment Plant
		3	5.0	15	60	Yes	18"	7000	Poor	Broad Irrigation
People colony	2	1	2.0	2.0	25	Yes	3'x2.5'	600	Poor	Waste water ponding in city
old Khanewal	2	3	4.0	12	50	Yes	3'x2.5'	2500	Poor	Broad Irrigation
Nizamabad	2	1	2.0	2.0	25	Yes	12"	500	Poor	Waste water ponding in city
Malikabad	1	1	2.0	2.0	25	Yes	18"	300	Poor	Waste water ponding in city
Jahanian road	2	4	5.0	20	50	Yes	32"	200	Poor*	Treatment Plant
168/10R	1	1	5.0	5.0	50	Yes	2'x2'	300	Poor	Broad Irrigation
Kabirwala road	2	2	4.0	8.0	50	Construction completed but disposal works is not functional as yet			Broad irrigation	

\*This GRP main is not taking the designed discharge as a result of which all disposal stations pumping into this main cannot be operated at the required capacity to drain of entire waste water from the city.

The phenomenon is responsible for surcharging of sewers and waste water flooding in various parts of the city. The sewers are being silted due to limited pumping from the city and ultimately these will be totally choked wasting all investments in this sector.

### 3.2. Recent interventions by PHE Department

PHED has planned, designed and is executing the sewerage scheme to cover the area of the city located on the north side of N5 Highway along Kabirwala road. Scope of work and completion status of this scheme is given below:

Name of scheme		Urban Sewerage Scheme Khanewal City		
Date of start		18-02-2015		
Expected date of completion		30-06-2019		
<b>Scope of Work</b>				
S.N.	Item of Work		Quantity	
			Components	
1	RCC sewers			
	a)	9"i/d	5,498-Rft	Work in Progress
	b)	12"i/d	7,921-Rft	
	c)	15"i/d	2,679-Rft	
	d)	18"i/d	1,983-Rft	
	e)	21"i/d	Nil	
	f)	24"i/d	1,253-Rft	
	g)	27"i/d	2,647-Rft	
2	Screening Chamber		1 No	
3	Collecting Tank		2 Nos	
4	Pump House		1 No	
5	Generator Room		1 No	
6	Out Fall Chamber		2 Nos	
7	Staff Quarter		1 No	
8	Boundary wall		1 Job	
9	Pumping Machinery (4.0 cusec, 50 BHP)		2 Nos	
10	Inter connections		1 Job	
11	External electrification		1 Job	
12	Sullage Carrier		200 Rft.	Not started
13	Generator 200KAV		1 No	Completed
14	GRP Force Main (18" dia)		2100 Rft.	

The above scheme is not yet operational.

### **3.3. The main issues and problems in the system**

The main problems and bottlenecks confronted by the city are given below;

#### **3.3.1. People colony disposal station**

It was proposed to eliminate this disposal station under Asian Development Bank (ADB) funded project namely Southern Punjab Basic Urban Services Project (SPBUSP) by connecting the 15" dia trunk sewer with 21" dia sewer laid under this project leading to the main outfall sewer along the Bypass Road. The connection was never completed and as informed by MC Khanewal staff, this 21" dia sewer has been completely choked by installing the consumer connections illegally and damaged due to recent construction of buildings on the alignment of this sewer. The disposal station has not been eliminated and is pumping waste water into a sullage carrier leading to lands near Khurram abad where ponding is now being created resulting in highly insanitary conditions.

#### **3.3.2. Nizamabad disposal station**

This disposal station was discharging waste water for broad irrigation in open areas of Nishat town and Al- Rehman town through 12" dia. force main and sullage carriers.

It was proposed to eliminate this disposal station under SPBUSP by connecting its 18" dia outfall sewer with 27" dia outfall sewer leading to Jahanian road disposal station. This connection was never completed and the waste water from this disposal works is still being pumped into the above mentioned areas giving rise to waste water ponding and insanitary conditions in the city.

As informed by MC staff the 32" dia GRP force main taking water from Jahanian Road disposal works and discharging in the treatment plant, is not taking the designed discharge because of which required quantity of waste water from the disposal stations cannot be pumped out and is resulting in surcharged sewers, flooding of the streets and roads. The worst effect of this problem is silting up of the sewers leading to their choking and failure of the entire sewerage system.

Even if the above mentioned connection is constructed the waste water from Nizamabad disposal station cannot be taken by the outfall sewer of Jhanian Road disposal works.

#### **3.3.3. Malikabad disposal works**

This disposal works was discharging its waste water in open areas near the Bypass road and its 18" dia outfall sewer was connected to 30" dia portion of the outfall sewer laid on Bypass road leading to Jahanian Road disposal works for elimination of this disposal station but unfortunately due to limited pumping in this disposal station as mentioned above, the waste water could not be diverted to the main outfall sewer and is still being pumped in the fields and open spaces along the Buypass road which is creating waste water ponding over here.

#### **3.3.4. Areas flooded with waste water**

The following areas of the city are subjected to waste water flooding because of sewer surcharging and overflowing.

1-Purana Khanewal	2-Camp Colony	3-Ghareebabad	4-Khaleel Town
5-Green Town	6-Islam Pura	7-Abbas Nagar	8-Sultan Town
9-Malikabad	10-Kot Allah Singh	11-Shadman	

The main cause of flooding is the silting up of sewers and choked sewers.

### 3.3.5. Un-served areas

The following areas of the city have not been provided with sewerage system as yet.

1-Gulshan-e-Ali	2-Johar town	3-Shizan Town	4-Fazal Town
5-Basti Yousafwali	6-Ibrahim city	7-Mushtaq colony	8-Fareed abad
9-Basti sarajai	10- Model town	11-Jinnahabad	12-Chak no 168/10R
13-Fazal Colony	14-Tibba abadi 88A	15- Ahmad nagar	16-Hamyatabad
17-Zahoorabad	18-Zahoorabad 2	19-Kot haq nawaz	20-Payra town
21-Kot Haq Nawaz	22-Chak no 88/10R	23-Bakhtiryari town	24-Allama iqbal town

### 3.3.6. Disposal/pumping stations

Under mentioned repairs/replacements are needed in the disposal stations;

Location of disposal works	Repair of Collecting tanks	Repair of screening chambers	Repair of pump houses	Pumping units	
				Replacement	Repair
Tariq Abad	2	2	1	-	4
People colony	2	2	1	-	1
old Khanewal	2	2	1	-	3
Nizamabad	2	2	1	-	1
Malikabad	1	1	1	-	1
Jahanian road	2	2	1	1	3
168 10R	1	1	1	1	-
<b>Total</b>	<b>12</b>	<b>12</b>	<b>7</b>	<b>2</b>	<b>13</b>

### 3.3.7. Force main Problem

As narrated earlier, GRP force main of 24" dia from Tariqabad disposal works to Jahanian Road disposal works and 32" dia GRP force main from Jahanian Road disposal works to treatment plant was laid for transmission of waste water from these disposal stations to waste water treatment plant under SPBUSP. Under this proposal the above mentioned three smaller disposal works were also to be eliminated by connecting their trunk sewers to the outfall sewer laid on bypass road and discharging into Jahanian road disposal station.

The present status of this system as informed by the MC staff is that the force main is not taking the designed discharge and is bursting at various locations. Hence limited pumping is being done at both of these disposal stations with under mentioned consequences;

- The peak hours discharge of the sewers cannot be pumped and thus the sewers get surcharged which is resulting in silting of entire sewerage system. This may lead to

complete failure of the system if some alternate remedy is not proposed and implemented.

- The above mentioned three disposal stations were proposed to be eliminated under the proposal framed and implemented. With the present state of affairs none of these disposal stations could be eliminated and the waste water is being pumped in fields and open spaces at various locations of the city. The city is rapidly inhabiting in this directions and ultimately large waste water ponding will be created in these areas which will create huge nuisance like obnoxious smell, pollution of the subsoil water, water borne and vector diseases and other menaces threatening the life of the residents.
- Some immediate steps need to be taken in this behalf to save the sewerage system from choking and save the citizen from the above mentioned menaces.

### **3.3.8. Sucker & jetter machines**

1 No sucker and 1 No jetting machines are being used by MC to remove blockades and cleaning of sewers. The barrels of the sewers are also being de-silted by winch machines. The sucker and jetting machines are quite old and require repairs along with supply of required pressure pipe for jetting machine.

### **3.3.9. Dewatering Sets**

MC has 6 Nos dewatering sets which are used for drainage of storm water as well as for desilting of sewers.

### **3.3.10. Manhole base frames and covers**

At number of locations the manhole base frames and covers were found damaged or missing which need replacement. MC also requires adequate number of manhole covers for immediate replacement after theft or damages.

### **3.3.11. Sullage carrier**

Sullage carrier of People colony disposal station with dimensions of 3''x2.5' needs repairs through a length of 300 Rft.

### **3.3.12. Waste water treatment**

A waste water treatment plant comprising of the stabilization ponds was constructed to lower the BOD and COD of the waste water to the permissible standards as per NEQS of Pakistan. MC Khanewal operated this treatment plant for some time but ultimately it was shut down and heavy capital spent on this plant was wasted. Water is directly being used by the farmers for broad irrigation without treatment. The plant needs to be rehabilitated and re-commissioned.

## **3.4. Consumer connections**

No consumer sewer/drain connection survey in the city has been conducted by this time. Hence the exact number of these connections cannot be estimated at this stage.

### 3.5. Tariff structure

No service charges have been levied for the liquid waste management which is resulting in operation of the service purely by injecting the subsidy. Only sullage water is being sold which is earning small annual revenue as given in the table below.

### 3.6. Operation & maintenance cost vs revenue recovery

The operation & maintenance cost of the sewerage system for the last five years along with the revenue recovery is given below;

<b>O&amp;M Expenditure vs Revenue Recovery (million Rs)</b> (includes manpower, electricity, repairs/replacement & supplies)						
<b>Year</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>Total for 5 years</b>
O&M expenditure	16.34	19.58	18.40	19.75	18.90	92.97
Revenue from sale of waste water	1.60	1.83	2.08	1.51	1.26	8.28
Subsidy given	14.74	17.75	16.32	18.24	17.64	84.69

### 3.7. Manpower deployed

The manpower deployed for the operation & maintenance of the system is given below;

Pump operators	6
Baidars	0
Supervisors	0
Sewer men	7
Total strength	13

The strength of the staff presently deployed is enough to operate and maintain the complete sewerage system and MC is demanding more staff for this purpose.

### 3.8. Service delivery

- a) The service in the city is very adversely being affected because of the waste water outfall problem due to poor performance of the GRP force main as described above. This is resulting in under mentioned issues;
- Surcharging and over flowing of sewers.
  - Flooding the streets and roads.
  - Damage to the private and public property.
  - Causing water borne, water related and vector diseases.
  - Creating public frustration.
  - Some areas in the city have not been provided with lateral sewers.

- Most of the city is being served with surface drains discharging into the sewers without gulley grating chamber which is allowing all the silt and the floating materials in the sewers and is the main reason for chocking of sewers.
- De-silting and cleaning of sewers will not bring about good results unless the outfall problem in the force main is addressed.

## Section-4 Solid waste management

### 4.1 Existing situation

A package for solid waste management costing Rs 100.00 million was sanctioned by Chief Minister Punjab under a C.M. Directive and the project was completed in 2016-17. The components completed and commissioned under this Package are given below;

SN	Description	Quantity or numbers	
		Supplied or constructed	Functional
<b>A</b>	<b>Machinery &amp; Equipment</b>		
1	Compactor trucks	4	4
2	1.0 cubic meter containers	191	191
3	Mini tippers	3	3
4	Hand cart type-1	87	40
5	Hand cart type-2	29	29
<b>B</b>	Landfill site equipped with impermeable lining in bed and slopes, leachate collection system, ramps, site parking area, site office, barbed wire, gate and staff quarter	12 acres	Functional
<b>C</b>	Vehicle parking area in the city with parking and washing facilities, parking sheds, office and toilet.	4 kanals	Functional

#### 4.1.1 Available resources

##### a) *Equipment & machinery*

In addition to the above mentioned machinery & equipment under mentioned collection and transportation machinery is also available with MC to handle the solid waste.

S.No	Equipment/machinery	Total available Nos	In working condition	Repair required
1	Tractor trolleys	8	8	2
2	Trolleys	8	8	5
3	5.0 m <sup>3</sup> containers	140	115	25
4	1.0 m <sup>3</sup> containers	191	141	50
5	Hand carts	118	58	60
6	Front blade tractors	1	1	1
7	Front End loader	1	1	1
8	Water bowsers	2	2	2

The existing machinery is quite sufficient to handle solid waste generated by MC Khanewal,.



## b) Manpower Deployed

The manpower deployed for collection, transportation and disposal of the solid waste is given in the table below. MC is demanding additional manpower for attaining satisfactory service delivery to the residents.

Slot	Sanctioned strength	Existing strength	Vacant post	Manpower on daily wages	Total man power deployed	Additional MC demand
Sanitary workers	194	138	56	56	194	200
Vehicle drivers	15	0	15	2	2	0
Supervisors	6	6	0	0	6	8
Sanitary inspectors	0	0	0	0	0	2
Total	215	144	71	58	202	210

As intimated by MC staff, man power is not enough to handle the solid waste in the entire city which results in low efficiency of collection and disposal of the waste inspite of having the most modern machinery & equipment. As a result of that MC is facing increased waste management cost as well as complaints regarding the insanitary conditions in the city.

Additional man power is needed to increase the efficiency of collection and transportation for improving the sanitary conditions and lower down the operational and maintenance costs.

## 4.2 Un-served and partially served areas

The entire city is not served with solid waste collection and disposal. The efficiency of the services is 67% as given below. Some areas of the city remain partially served. The detail of these areas is given blow.

### a) Partially served areas

No regular service is rendered in the under mentioned areas. The main complaints are attended by sending the machinery & labor once or twice a week.

1- Gulshan-e-Ali	2- Shiraz Town	3- Kot Haq Nawaz
4- Fazal Town	5- Basti Yousaf Wali	6- Ibrahim City Phase-I
7- Farukh Colony	8- Basti Zulfiqar	9- Purana Khanewal
10- Camp Colony	11- Basti Molvi Hayyat	12- Habat Kot
13- Mohalla Mujahidabad	14- Allama Iqbal Town	15- Peoples Colony
16- Zahoorabad	17- Rehman Colony	18- Gulberg Town
19- Hamayatabad	20- Gulzar Ibrahim Town	21- Nizamabad
22- Housing Scheme	23- Salah-ud-din Town	24- Rehman Town
25- Hakeemabad	26- Gulshan Ali Housing Scheme	27- Khurram Pura

28-Madina Colony	29-Kot Muhammad Hussain	30-Al Raheem Town
31-Nishat Town	32-Abbas Nagar	33-Malikabad
34-Khokharabad	35-Jaswant Nagar	36-Sultan Town
37-Kamaran Colony	38-Fazal Colony	

#### b) Unserved areas

Under mentioned areas are still unserved;

1- Mushtaq Colony	2- Fareedabad	3- Ahmed Nagr
4- Basti Sarajai	5- Bakhtiryari Town	6- Jinnahabad
7- Payra Town	8- Model Town	9-Chak No.168/10R
10-Basti Jhandeer	11- Chak No.90/10R	12- Tibba Abadi 88A/10R
13- Chak No.88/10R		

#### 4.3 Solid waste Generation & Disposal

The solid waste management efficiency along with present landfill are given below;

Total waste generated per day		Total waste collected (Tons)		% Efficiency of disposal	Name of dumping sites	
Cubic meters	Tons	Cubic meters	Tons			
186	93	124	62	65%	Land-fill site near treatment plant & industrial state measuring 12 acres is functional and entire waste is being carted to this landfill	
Distance from city center (Km)						8.5 km
Open dumping= O Landfill= LF						LF

\*Assumed density of loose solid waste = 500 KGs per cubic meter

#### 4.4 Landfill Site development

The landfill site having functional area of 12 acres located at a distance of 8.5 KM from the center of city is currently being operating by MC Khanewal.

Location	Description / Shortcomings	Unit	Area	
			Total available	Presently developed
Near waste water treatment plant & industrial state	Operation of the landfill is not as per standard procedures	Acre	24.5	12.0

#### 4.5 Vehicle parking Area:

The vehicles parking area has been developed near the central water works and provided the facilities of parking sheds, washing ramp, office, toilet, guard room, boundary wall and gate. It is being properly maintained by the MC and has quite sufficient space for parking all solid waste and other vehicles.

#### 4.6 Levying of sanitation fees

No sanitation fee has been levied by MC and the entire expenditure given below is being met from MC's own resources and the PFC share being given by Provincial government.

#### 4.7 Solid waste management financials (million Rs.)

The annual expenditure incurred by MC for last 5 years is given below which includes manpower, energy, repairs, supplies etc.)

Year	2013-14	2014-15	2015-16	2016-17	2017-18
O&M Expenditure (million Rs)	70.00	91.76	93.47	97.14	74.20

MC will have to levy the sanitation fee to meet the expenditure on solid waste management or at least to lower down the subsidy presently being injected.

#### 4.8 Service delivery

The service delivery level is good in some of the important areas especially the civil lines and main roads of the city. However some portions of the city remain either un-served or partially served because of shortage of sanitary staff.

The solid waste is being dumped in landfill site without proper procedure and management and is landfill is not properly utilized due to irregular dumping of waste. Training was imparted to the staff for waste dumping procedure and provision of earth covers but MC staff is not abiding on that.

## Section-5 Roads

---

### 5.1 City Roads Hierarchy

The main roads in the city and emerging from the city have under mentioned hierarchy;

S.No	Name of the road	Owner department
1	National Highway N-5	Federal Govt. (NHA)
2	Jahanian Road	Provincial Govt.
3	Jahanian bypass Road	do
4	Chak Shahana Road	District Govt.
5	Khanewal Kabirwala Road	do
6	Makdum Pur Road	do
7	All others roads	Municipal Committee roads

All these roads have been marked on the map of the city in different colors

### 5.2 Existing situation

Some of the roads in Khanewal especially main roads and civil lines roads have good wearing surfaces but some primary and secondary roads are not in good condition. The detail of these roads is given as below.

### 5.3 Inventory of roads

Inventory of primary & secondary roads in Khanewal city is given below;

**Inventory of primary & secondary roads in Khanewal City**

Sr.#	From	To	Road information								Interventions required		
			Category of road	Row (ft)	Length (km)	Width (ft)	TST, Asphalt or concrete pavers	Meridian (yes/No)	Road condition	Road drainage (yes/No) & its condition	Raising (feet)	Drain section	Raising of manholes (yes/No) (give Nos)
1	Ayube Chowk	Foot Ball Chowk	A	60	0.40	18+18	TST	Yes	Poor	Yes	0	-	No
2	R. Station Chowk	Chongi Chowk	A	100	1.65	20+20	TST	Yes	Poor	Yes	0	-	No
3	Nizamabad Chowk	Khokharabad Chowk	C	24	1.65	12	TST	No	Poor	Yes	0	-	No
4	Jaswant Nagar	Railway Station	B	100	1.35	30	TST	Yes	Poor	Yes	0	-	No
5	Railway Station	Railway Crossing	B	100	1.20	30	TST	Yes	Poor	Yes	0	-	No
6	Jaswant Nagar	Khokharabad Chowk	B	60	1.40	20	TST	Yes	Poor	Yes	0	-	No
7	68 Chowk	Stadium Road	C	20	1.25	15	TST	No	Poor	Yes	0	-	No
8	City Park	Dhq	C	30	2.00	15	TST	No	Poor	Yes	0	-	No
9	Tariqabad Disposal	Jamia Anatiya	C	48	1.20	20	TST	Yes	Poor	Yes	0	-	No
10	Football Chowk	Masjid Sadiqa Akbar	A	100	0.80	20+20	TST	Yes	Poor	Yes	0	-	No
11	Block 1	Block 4	C	30	1.00	18	TST	No	Good	Yes	0	-	No

12	Block 5	Block 8	C	30	0.91	18	TST	No	Good	Yes	0	-	No
13	Block 9	Block 12	C	30	1.10	18	TST	No	Good	Yes	0	-	No
14	Block 13	Block 16	C	30	1.00	18	TST	No	Good	Yes	0	-	No
15	SP Chowk	Circuit House	C	30	0.64	24	TST	No	Good	Yes	0	-	No
16	Circuit House	College Stop	C	30	0.90	20	TST	No	Good	Yes	0	-	No
17	Khuram Pura	Commerce College	C	30	0.90	16	TST	No	Good	Yes	0	-	No
18	Girls College	Graveyard Civil Line	C	30	0.60	16	TST	No	Good	Yes	0	-	No
19	Fh Hospital	Kot Sheikh Fateh Ali	C	30	1.00	16	TST	No	Good	Yes	0	-	No
20	Rao Shakir Ali	Civil Line	C	30	1.00	16	TST	No	Good	Yes	0	-	No

**Road categories** A = dual carriage way B = Single road with two lanes C = Single road with one lane

## 5.4 Required Interventions

### 5.4.1 Resurfacing of roads

Sr.#	Name of road	Length	Existing Type
		Rft.	TST/ Asphalt
R1	Ayub Chowk to Railway Road	2600	TST
R2	Under Pass Railway	1200	TST
R3	College Stop to Gujar Chowk to Khurampura	4300	TST
R4	Girls College Chowk to Football chowk (dual carriage way)	1000	TST
R5	Nizam Abad	2900	TST
R6	Colony No. 3	1000	TST
R7	PirSirajChowk to Ghareeb Abad	1200	TST
R8	City park to Tariq abad	600	TST
R9	Sabzi Mandi Road	800	TST

### 5.4.2 Widening & improvement of roads

Sr. #	Name of road	ROW	Length	Existing Width	Proposed width	Drains Required	Shoulders Required
		Ft	Km	Ft	Ft	(YES/NO)	(YES/NO)
W1	Jaswant Nagar To Railway Station	100	1.35	30	24+24	Y	Y
W2	Railway Station To Railway Crossing	100	1.2	30	24+24	Y	Y
W3	Jaswant Nagar To Khokharabad chowk	60	1.4	20	24+24	Y	Y
W4	68 Chowk To Stadium Road	20	1.25	15	20	Y	Y
W5	DHQ to sabzi mandi road	30	2	15	24	Y	Y
W6	Tariqabad Disposal To Jamia Anatiya	48	1.2	20	20+20	Y	Y

### 5.4.3 Construction of new roads

Sr. #	Name of road	ROW	Length	Width	Drains Required	Shoulders Required
		Ft	Km	Ft	(YES/NO)	(YES/NO)
N1	Football chowk To Masjid Siddique Akbar	100	0.8	24+24	Y	Y



**Section-6**  
**Parks and open spaces**

**6.1. Existing situation**

**6.1.1. Existing Parks**

Khanewal City has four main parks as mentioned below;

S.N.	Name of park	Area in acres	Ownership & maintained by
1	City park	12.5	Municipal Committee Khanewal
2	Fazal Park	11.0	do
3	Yousaf Park	0.75	do

**6.1.2. Inventory of Parks**

S.N.	Name of Park	1	2	3
		City park	Fazal Park	Yousaf Park
1	Location	RCA Chowk	Fazal park road	Ayube chowk
2	Area of Park in acres	12.5	11	0.75
3	<b>Watering &amp; Irrigation</b>			
a	Tube well	Yes	Yes	No
b	Water Supply from municipal system	No	No	Yes
c	Underground water tank	No	No	No
d	Pumping unit	Yes	Yes	Yes
e	Distribution pipe lines	Yes	No	No
f	Valves	Yes	No	No
g	Sprinkler system	No	No	No
4	<b>Landscaping &amp; Plantation</b>			
a	Grass beds	Good	Poor	Good
b	Flower beds	Good	NA	Good
c	Hedges	NA	NA	NA
d	Plants	Good	NA	Good
5	<b>Lights</b>			
a	Poles and masts	Good	NA	Good
b	Cables	Good	Poor	Good
c	Brackets and lights	Good	NA	Good

d	Bulbs and tubes	NA	Poor	NA
e	Control units	Good	Poor	Good
<b>6</b>	<b>Structures</b>			
a	Buildings	Good	Poor	Poor
b	Fountains & water fall structure	NA	NA	NA
c	Walkways	Poor	Poor	Poor
d	Bridges & culverts	NA	NA	NA
e	Boundary wall & gate	Good	Poor	Good
f	Toilets	Good	NA	NA
g	Lakes & brooks	NA	NA	NA
<b>7</b>	<b>Mechanical equipment</b>			
a	Pumping units	Good	Good	NA
b	Swings	Poor	NA	Poor
c	Children games	NA	NA	NA
d	Fixtures	NA	NA	NA
e	Benches	Poor	Poor	Poor
<b>8</b>	<b>Sanitation &amp; water supply</b>			
a	Litter bins	Poor	NA	NA
b	Toilet fixtures	Good	NA	NA
c	Sewerage system	Poor	NA	NA
d	Vegetation cuttings & disposal	NA	NA	NA
e	Drinking water	Good	NA	NA
f	Water pipes	Poor	NA	NA

## 6.2. Rehabilitation of the existing parks

Some of the facilities in these parks are in good condition but some of these are in poor condition and need rehabilitation and improvement. On the other hand, some important facilities are also missing and needed to be provided. The detail of all the required interventions in these parks for their upgrading is given below;

S No	Name of Park	City park	Fazal Park	Yousaf Park
1	Location	RCA Chowk	fazal park road	Ayube chowk
2	Area of Park in Kanals	12.5	11.0	0.75
3	Plantation of ornamental trees	Required	Required	Required
4	Provision and fixing of brackets and lights on the existing light poles	Existing	Required	Existing
5	Irrigation system	Not Required	Not Required	New system required
6	Provision of sprinkler lawn watering system	Required	Required	Required
7	Installation of Service cables and LT Control panels	Existing	Required	Existing
8	Toilets & toilet fixtures	Rehabilitation of existing toilets	New Required	New Required
9	Lakes	No lake is there.	No lake is there.	No lake is there.
10	Swings	Rehabilitation of the existing swings	New Required	Rehabilitation of the existing swings
11	Children electric outdoor games	New Required	New Required	New Required

12	Benches	Rehabilitation of the existing benches if possible or provision of new concrete benches		
13	Sewerage system	Rehabilitation of existing toilets	New Required	New Required
14	Drinking water	Rehabilitation of the existing facilities	Provision of new facility	Provision of new facility
15	Cafeteria	Required	Required	Required
16	Parking lots	Rehabilitation of existing parking lots to provide more space and parking facilities		New required
17	Restraints for entry of the vehicles in the parks	Required	Required	Required

### 6.3. Open spaces

The city has three open spaces. Municipal Committee desires to convert the open spaces in to parks because of congestion in the existing parks. Construction of these parks will bring about good recreational facilities for the citizens. Detail of open spaces for conversion in these parks is given below:

#### Conversion of open spaces to parks/Play-ground

Sr. No.	Location of open space	Area of open space	Proposed utility
1	Habat Kot	5.0 Acres	Park
2	Kot Barbal	80 x 120 Ft	Park
3	Jaswant Nagar	5.0 Acres	Park
4	Shaheen Town	5.0 Acres	Park
5	3-Marla housing scheme	4.0 Acres	Park

### 6.4. O&M expenditure and revenue recovery (million PKR)

Year	2013-14	2014-15	2015-16	2016-17	2017-18	Total for 5 years
O&M expenditure	2.0	2.47	2.35	2.74	3.15	12.71
Revenue earned	0	0	0	0	0	0
Subsidy injected	2.0	2.47	2.35	2.74	3.15	12.71

## Section-7 Street Light

### 7.1. Existing situation

The status of the existing street light in Khanewal city is given below;

<b>A. Detail of street lights on main Roads</b>								
Sr. No	Road	Type of luminaries				Total	Operational Status	Poles type WAPDA pole / street light pole
		Sodium	LED (100W)	Tube light (40 W)	Energy Saver / light bulb			
1	Jaswant Nagar Chowk to Special Education School	-	-	-	8	8	Partially Operational	WAPDA pole
2	Jaswant Nagar chowk to Football Chowk	-	50	-	-	50	Partially Operational	PHED pole / 25 Double aram (Not handed over to MC)
3	Awan Chowk to Jaswant Nagar Chowk	-	50	-	-	50	Partially Operational	PHED pole / 25 Double aram (Not handed over to MC)
4	Police line road	-	-	-	50	50	Non-Operational	WAPDA pole
5	Sabzi Mandi to Girls College road	-	-	-	18	18	Partially Operational	WAPDA pole
6	Stadium road	-	-	-	24	24	Partially Operational	WAPDA pole
7	Chongi Chowk to Ayoub Chowk	-	20	-	10	30	Partially Operational	WAPDA pole
8	Girls College road	-	-	-	13	13	Non-Operational	WAPDA pole
9	Sir Syed road	-	-	-	13	13	Fully Non-Operational	WAPDA pole
10	Ayoub chowk to Railway Station	-	34	-	-	34	Partially Operational	St. Light Poles
11	T-chowk to SP chowk	-	-	-	13	13	Non-Operational	WAPDA pole
12	Railway station to SP chowk	-	-	-	9	9	Non-Operational	WAPDA pole
13	Ayoub chowk to Railway Crossing	-	-	-	15	15	Non-Operational	WAPDA pole

14	Old Khanewal road	-	-	-	27	27	Partially Operational	WAPDA pole
15	Old Khanewal station road	-	-	-	30	30	Non-Operational	WAPDA pole
16	Peoples Colony road	-	-	-	16	16	Non-Operational	WAPDA pole
17	68 Chowk to Stadium road	-	-	-	46	46	Non-Operational	WAPDA pole
18	SP chowk to People Colony road	-	-	-	15	15	Partially Operational	WAPDA pole

### B. Street Light in wards and streets

Sr. No.	Ward No.	Mohallah	Total No. of Street Lights (Energy savers)
1	Ward No. 1	Aziz Abad	-
		Bhatta Zafar Ullah	12
		Farid Abad	-
		Parhyaran Wala	-
		Rajbah Nanak Pur	-
		Sirajia Town	-
2	Ward No. 2	Bhatta Abdul Majid	-
		Haibat Kot	39
		Kothi Faisal Imam	-
		Mushtaq Colony	10
		Niazi Wala	14
		Railway Phatak	15
		Shabnam Cinema	8
3	Ward No. 3	Chitti Kothi	10
		Farah Abad	19
		Qazian Mohallah	
		Old Khanewal	26
4	Ward No. 4	Basti Kot Haq Nawaz	21
		Gulshan-e-Ali	-
		Lahore More	-
		Mohallah Bhattian	-
		Old Khanewal	34

		Yousaf Abad Near Chhaoni	-
5	Ward No. 5	Basti Kot Dost Muhammad	6
		Basti Molvi Hayat	6
		Chah Niazi Wala	-
		Chowk Haji Moj Din	10
		Old Karkhana	29
		Railway Colony	-
6	Ward No. 6	Basti Khalil Abad	-
		Oad Basti	-
		Railway Colony	-
		Railway Landhi	38
7	Ward No. 7	Chan Shah Town	41
		Christian Colony	13
		Civil Lines	59
		Nizam Abad	-
		Quarters Hospital	-
		Railway Stand	-
		RCA Colony	4
8	Ward No. 8	Chan Shah Town	10
		Yousaf Park	10
9	Ward No. 9	Androon Vehari Adda	-
		Islam Park	27
		Lakkar Mandi	17
10	Ward No. 10	Block 3,4,7,8	89
11	Ward No. 11	Block 6,2,1	69
12	Ward No. 12	Azeem Tow	18
		Bilal Mohallah	37
		Islam Park	29
		Karkhana Shakoor	-
		Lakkar Mandi	26
		Tariq Abad	115
13	Ward No. 13	Block 10 to 13, 16	35
14	Ward No. 14	Block 14-15	26
		Gharib Abad	42
15	Ward No. 15	Colony No.1	55
		Bilali Masjid	29

		Farooq e Azam	10
		Noor Masjid	15
		Mehngay Wali Puli	2
16	Ward No. 16	Afzal Town	-
		Gulberg-I	75
		Gulberg-II	107
		Nizam Abad	-
		Rehman / Irshad Colony	27
		X-Block	51
17	Ward No. 17	Civil Lines	53
		Hakim Abad	35
		W-Block	11
18	Ward No. 18	Jamia Abad	23
		Mujahid Abad	15
		Railway Quarters	-
19	Ward No. 19	3-Marla Scheme	25
		Nizam Abad	-
		Z-Block	15
20	Ward No. 20	Civil Lines	54
		MC Khanewal	24
		Khurram Pura	60
		Madina Colony	-
		Shadab Town	-
21	Ward No. 21	Khokhar Abad	12
		Al-Raheem Town	-
22	Ward No. 22	Abbas Nagar	-
		Kot Muhammad Hussain	5
23	Ward No. 23	Jaswant Nagar	72
		Madina Town	-
24	Ward No. 24	Al-Haram City	-
		Faisal Town	-
		Jaswant Nagar	21
		Kamran Colony	20
		Makkah Town	-
25	Ward No. 25	Colony No.1	54
		Colony No.3	-
		Colony No.1 Saddiqia Masjid	6
		Colony No.3 Islam Pura	15

		Colony No.3 Mehboob Masjid	1
26	Ward No. 26	Imam Bargah	5
		Minar Masjid	3
		Noor Masjid	10
27	Ward No. 27	Block No.9	25
		Green Town	10
		Shadman Town	-
		Tariq Abad	23
28	Ward No. 28	Green Town	11
		Kot Ala Singh	39
29	Ward No. 29	Colony No.2 Civil Lines	30
		Colony No.2 Sargana House	9
30	Ward No. 30	Colony No.3 Islam Pura	15
		Colony No.3 Makki Masjid	-
32	Ward No. 32	Colony No.3	-
		Colony No.3 Multani Darbar	10
33	Ward No. 33	Amin Town	-
		Colony No.3	-
		Colony No.3 Kot Birbal	41
		Colony No.3 Multani Darbar	-
34	Ward No. 34	Colony No.3	-
		Colony No.3 Amin Town	6
		Marzi Pura	4
36	Ward No. 36	Zahoor Abad	10
43	Ward No. 43	Dingian Pullan	-
		Khanewal Kohna	15
44	Ward No. 44	Khanewal Kohna	12
		<b>Total No of lights</b>	<b>2134</b>

## 7.2. Rehabilitation of the existing street lights

MC Khanewal requires rehabilitation in existing street lights on the under mentioned areas of the city;

S. #	Name of area	No. of lights
1	City Block No. 1 to 16	115
2	Jaswant Nagar Road KWI, Madina Town, Kokhar Abad, Abbas Nagar, Malik Abad, Basti Chan Shah, Islam park, Tariq Abad, Gulshan Road, New Sabzi Mandi Road, Changar Mohallah Road, Khuram Pura, Azeem Town	155



3	Peoples Colony, Block W,X,Y,Z, 3 Marala Scheme, Gujjar Chowk Road, Rehman Town, Nizama Abad, Mujahida Abad, SP Chowk to Jaswant Nagar Chowk, Civil Line, Gulbarg Town, Irshad Colony, Bewa Colony	108
4	Old Khanewal, Habat Kot, Chah Nazi Wali, Bilal Mohallah, Mushtaq Colony, Basti Kot, Dost Muhammad, Basti Kot Madina, Old Kharkhana, Railway Landhi	100
5	Colonies Colony No. 1 to 3	120
6	Main Roads, Lahore More to Ayoub Chowk, Ayoub Chowk to Chisht Nagar, Awan Chowk to station chowk to niazi chowk, Station Chowk to Ayoub Chowk, SP Chowk to T Chowk, Ayoub to Football Chowk, Sir Syed Road to New Sabzi Mandi Chowk, TMA Office to Lal Masjid CHowk	100
<b>Total</b>		<b>698</b>

### 7.3. Provision of new street lights

MC Khanewal requires to provide new street light on the under mentioned main roads of the city;

S. #	Name of road/street	Length (Km)
N1	Special Education School To Khokharabad Chowk	0.57
N2	DHQ To Sabzi Mandi Road	1.35
N3	Tariqabad Disposal To Sabzi Mandi	0.54
N4	Jaswant Nagar To Sp Chowk	1.00
N5	Nizamabad Chowk To Khokharabad Chowk	1.65
N6	Railway Station To Nizamabad Chowk	1.40
N7	Nizamabad Chowk To N5	1.20
N8	Station Road	1.10
N9	Khawaja Gareeb Nawaz Road	1.10
N10	Jaswant Nagar Chowk To Special Education School	0.85
N11	Police Line Road	1.30
N12	Sabzi Mandi To Girls College Road	0.75
N13	Stadium Road	0.81
N14	Chongi Chowk To Ayoub Chowk	0.77
N15	Girls College Road	0.40
N16	Sir Syed Road	0.86
N17	T-Chowk To SP Chowk	0.70
N18	Railway Station To SP Chowk	0.37
N19	Ayoub Chowk To Railway Crossing	0.78
N20	Old Khanewal Road	1.20
N21	Old Khanewal Station Road	1.00
N22	Peoples Colony Road	0.45
N23	68 Chowk To Stadium Road	1.23
N24	SP Chowk To People Colony Road	0.64
N25	3 Marla housing scheme Gujjar chowk road To Aslam Atta Chakki	0.5
<b>Total Length</b>		<b>22.52</b>

#### **7.4. Expenditure on street lights**

Under mentioned expenditure on the Operation & Maintenance of the existing street lights has been incurred by MC Khanewal during the last 5 years. This includes the energy cost, manpower cost and cost of repairs and replacements.

(All figures in million Rs)

<b>Year</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>
<b>O&amp;M Expenditures</b>	3.99	4.2	6.24	7.15	8.70

### **Section-8**

#### **Public Private Partnership projects & Collaborative Projects executed by MC**

---

##### **8.1. Planning & Execution of PPP projects**

As informed by Chief Officer, no project in the Public Private Partnership Mode & Collaborative Mode has ever been executed by the Municipal Committee or defunct TMA Khanewal. As such the key officers and staff have no experience as well as capacity for planning estimation and execution of such projects.

## Section-9

### Budgetary provisions on development of services infrastructure and O&M Cost

#### 9.1. Development expenditure

The expenditure incurred on the development projects from year 2013-14 to the current financial year & source of financing is given below

(All figures in million Rs)

Description	2013-14	2014-15	2015-16	2016-17	2017-18
Expenditure on Development Projects	40.226	28.859	4.945	1.171	60.124
Source of Financing of Development Projects	ADP grants & own source revenue				

#### 9.2. Expenditure on O&M of services and revenue generated

Description	2013-14	2014-15	2015-16	2016-17	2017-18
<b><u>Water supply</u></b>					
Total O&M cost	13.105	16.376	17.25	17.081	17.55
Revenue earned	1.214	1.54	1.25	1.15	0.85
Subsidy injected	11.891	14.84	16.00	15.93	16.7
<b><u>Sewerage/drainage</u></b>					
Total O&M cost	16.34	19.58	18.40	19.75	18.90
Revenue earned	1.60	1.83	2.08	1.51	1.26
Subsidy injected	14.74	17.75	16.32	18.24	17.64
<b><u>Solid waste management</u></b>					
O&M cost	70	91.76	93.47	97.14	74.2
Revenue earned	0	0	0	0	0
Subsidy injected	70	91.76	93.47	97.14	74.2
<b><u>Parks</u></b>					
O&M cost	2	2.47	2.35	2.74	3.15
Revenue earned	0	0	0	0	0
Subsidy injected	2	2.47	2.35	2.74	3.15
<b><u>Slaughter houses</u></b>					
O&M cost	1.00	1.20	1.10	0.19	1.00
Revenue earned	0.36	0.21	0.1	0.19	0.24
Subsidy injected (-) Income (+)	0.64	0.99	1.00	0	0.76
<b><u>Street Light</u></b>					
Total Expenditure	3.99	4.20	6.24	7.16	7.70
Revenue earned	The service is not charged.				

### Section-10 Manpower deployment & shortage

The manpower deployed by MC Khanewal in various Municipal Services is given below. MC is experiencing manpower shortage in some of the services which is also explained herein.

S.No	Description	Sanctioned Regular strength	Actual Regular deployment	Regular Vacant Slots	Employed on daily basis	Shortage of regular personnel	Additional requirement
<b>A</b>	<b>Office manpower</b>						
1	Key officers (BPS-17 & above)	6	4	2	0	2	0
2	Sub engineers	2	1	1	0	1	0
3	Support staff (BPS-16 & below)	100	76	24	0	24	40
	<b>Total office manpower (A)</b>	<b>108</b>	<b>81</b>	<b>27</b>	<b>0</b>	<b>27</b>	<b>40</b>
<b>B</b>	<b>Municipal services</b>						
1	Water supply	23	13	10	0	13	21
2	Sewerage	19	19	0	0	0	8
3	Solid waste management	215	144	71	58	71	210
4	Parks & Roads	0	0	0	0	0	20
6	Street lights	0	0	0	0	0	2
7	Slaughter houses	0	0	0	0	0	5
	<b>Total municipal services (B)</b>	<b>257</b>	<b>176</b>	<b>81</b>	<b>58</b>	<b>84</b>	<b>266</b>
	<b>Grand Total (A+B)</b>	<b>365</b>	<b>257</b>	<b>108</b>	<b>58</b>	<b>111</b>	<b>306</b>

**Section-11**  
**Public opinion surveys regarding the municipal service delivery**

S. No.	Name of Service	Total persons interviewed	Opinion of the persons interviewed				Average consumer opinion
			Poor (Nos)	Fair (Nos)	Good (Nos)	Excellent (Nos)	
1	Water supply quantity	10	6	4	0	0	Poor
2	Water supply quality	10	5	3	2	0	Poor
3	Sewerage	10	2	7	1	0	Fair
4	Drain cleaning	10	5	5	0	0	Fair
5	Street sweeping	10	3	7	0	0	Fair
6	Solid waste collection & disposal	10	3	7	0	0	Fair
7	Condition Parks & play grounds	10	5	4	1	0	Fair
8	Slaughter house functioning	10	4	6	0	0	Fair
9	Street light functioning	10	0	8	2	0	Fair
10	General condition of roads	10	6	4	0	0	Poor
11	Complaint attending capability	10	5	5	0	0	Fair

**Survey of Public general view over service delivery**

S.No	Name of person interviewed	Muhallah or colony	Water supply		Sewerage	Drain cleaning	Street sweeping	Solid waste collection & disposal	Roads	Parks & play grounds	Slaughter houses	Street light	Complaint addressal
			Quantity	Quality									
1	Rana Faisal	Basti Chann Shah	Poor	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Fair	Poor
2	Ali Raza	Block-7	Fair	Fair	Fair	Poor	Fair	Fair	Fair	Fair	poor	Good	Fair
3	Abdul Haddi	Block-12	Poor	Fair	Fair	poor	Fair	Fair	Fair	Fair	Fair	Good	Poor
4	Sheikh Imran	Colony No.1	Fair	Fair	Fair	Poor	Fair	Fair	Fair	Fair	Fair	Fair	Fair
5	Raja	Green Town	Poor	Poor	Poor	Poor	Fair	Fair	poor	Fair	Fair	Fair	Poor
6	Bilal farooq	Madina Town	Fair	Fair	Fair	Fair	Fair	Fair	Poor	poor	Fair	Fair	Fair
7	Adil ihsan	Civil Lines	Fair	Fair	Fair	Fair	Fair	Fair	Poor	Poor	Fair	Fair	Fair
8	Muneeb Zia	Ameen Town	Poor	Poor	good	Fair	Poor	Poor	poor	good	poor	Fair	Poor
9	Zeeshan Bashir	Tariqabad	poor	poor	Fair	Fair	Poor	Poor	poor	poor	Poor	Fair	poor
10	Umair Majeed	Purana Khanewal	Poor	Fair	Poor	Poor	Poor	Poor	Poor	poor	Poor	Fair	Fair