Beneficiar:
MUNICIPIUL BRASOV
B-dul Eroilor, nr. 8

Proiectant general:
S.C. PRINFO s.r.l.
Calea Bucuresti, nr.1, ap.11 – Brasov

Elaborator studiu:
URBI PLAN s.r.l.
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STUDIU de TRAFIC

Largire str. Institutului
(sector CF Brasov - Sibiu - Ocolitoarea Brasov)
drum de legatura si amenajare intersectie
str. Institutului - Ocolitoarea Brasov

- 03 august 2020 –

Contract: nr. 3 / 2020

Elaborator studiu:

URBI PLAN s.r.l.

Str. Traian nr. 222, ap. 4s, sector 2 - Bucuresti

FOAIE DE SEMNATURI

dr.ing. ***Valentin ANTON*** .....

- 03 august 2020 –

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STUDIU DE TRAFIC

pentru studiu de fezabilitate

"Largire str. Institutului (sector CF Brasov - Sibiu - Ocolitoarea Brasov), drum de legatura si amenajare intersectie str. Institutului - Ocolitoarea Brasov"

Prezentul studiu de trafic a fost realizat la solicitarea societatii comerciale *PRINFO s.r.l.*, care doreste analiza de trafic pentru intocmirea studiulului de fezabilitate destinat investitiei "*Largire strada Institutului pe sector cuprins intre C.F. Brasov - Sibiu si varianta Ocolitoare a Municipiului Brasov*".

1. GENERALITATI ASUPRA CADRULUI DE INTOCMIRE A STUDIULUI

1.1. Conceptul de abordare al studiului

Mobilitatea in mediul urban si peri-urban

Într-un înţeles general, în domeniul de studiu al oraşului si al vecinatatilor sale, *mobilitatea defineste capacitatea de deplasare a persoanelor, mărfurilor şi activităţilor, fiind determinată şi legată de spaţiu.* Existenţa unei distanţe de parcurs, cât şi a motivaţiei fundamentale *„accesibilitatea activităţilor localizate"* determina in sens larg *mobilitatea spaţială.*

O mobilitate sustenabilă – care să permită oamenilor şi bunurilor să circule liber, în siguranţă, cu protejarea mediului înconjurător - reprezinta principalul obiectiv al comunitatilor umane care, prin dezvoltarea politicilor de transport, va creea cadrul necesar pentru asigurarea calitatii vieţii şi pentru dezvoltarea economica.

In conditiile societatii actuale, "*serviciul de transport*" este rezultatul eforturilor depuse de specialistii ce isi aduc aportul la realizarea unei activitati eficiente. In acest sens, rolul determinant in gestionarea mobilitatii urbane este conditionat de cooperarea factorilor implicati, care prin actiunile lor, pot influenta *"politica de*

transport" la nivel local (comuna, oras, judet) sau la nivele superioare (stat, regiune).

Obiectivele studiului

Studiul de trafic analizeaza modul in care traficul generat/atras de investitiile imobiliare prevazute in P.U.Z.-urile elaborate pentru zona urbana cuprinsa intre str. Institutului, Centura ocolitoare si CF Brasov Sibiu, vor influenta desfasurarea acestuia pe strada Institutului, strada ce se propune a avea 4 benzi de circulatie in sectiune transversala.

In cadrul studiului de trafic au fost analizate variantele de desfasurare a traficului rutier in acord cu solutiile propuse in documentatiile de urbanism primite. Solutia propusa de proiectant pentru traseul strazii Institutului prevede extinderea latimii partii carosabile a strazii de la 2 benzi de circulatie existente la 4 benzi si realizarea unei intersectii la nivel intre Varianta ocolitoare a Municipiului Brasov si drumul de legatura cu strada Institutului. Traseul ce se va proiecta are o lungime de aproximativ 1600m.

Analizele de trafic evalueaza, pe de o parte situatia actuala a desfasurarii deplasarilor, iar pe de alta parte formuleaza estimari ale desfasurarii traficului rutier dupa realizarea extinderii partii carosabile a strazii Institutului. Analizele de trafic pentru artera rutiera extinsa sunt corelate cu propunerile dezvoltarilor urbanistice prevazute in zona. Modelarile de trafic au fost realizate atat pentru traficul actual cat si pentru traficul estimat in perspectiva. Avand in vedere faptul ca in momentul actual in zona exista un real potential urbanistic in posibila dezvoltare, in cadrul studiului de trafic au fost intocmite analize cu privire la estimari de crestere a debitelor de trafic pe arterele studiate. Studiile intocmite pun in evidenta limitele ale capacitatii de circulatie a intersectiile din zona, in ipoteza in care circulatia se doreste a se desfasura in conditii corespunzatoare.

In cadrul studiului de trafic au fost analizate conditiile de efectuare a deplasarilor, utilizandu-se in acest scop principiul modelarii numerice a traficului rutier. Modelele de trafic au la baza investigatii de tip *"sondaj de trafic"* realizate de beneficiar pe sectorul rutier analizat.

Utilizarea conceptului de modelare numerica a desfasurarii traficului rutier ofera o serie de avantaje:

- sistematizarea si gestionarea datelor de trafic inregistrate din masuratori;
- realizarea de modele de trafic pentru valori actuale ale traficului de vehicule;
- formularea unor estimari asupra desfasurarii circulatiei in intersectii;
- realizarea unor variante de optimizare a desfasurarii traficului.

1.2. Documentatii utilizate pentru realizarea studiului

Prezentul studiu s-a realizat pe baza unei cercetari complexe asupra documentelor de specialitate care abordeaza problematica deplasarilor in zona analizata.

Documentatiile analizate au fost puse la dispozitie de beneficiar:

- Planul de Mobilitate Urbana Durabila Brasov 2017.
- Plan largire str. Institutului propunere PRINFO s.r.l. – proiectant.
- Plansa reglementarilor urbanistice ce cuprinde reglementarile pentru: *"P.U.Z. Ansamblu imobile colective servicii si comert aprobat de HCL nr.982/2008" si "P.U.Z. Pavel"*.
- Masuratori de trafic pe str.Institutului.
- Date recensamant de circulatie – post recenzare nr. 751.

Etape de studiu

In cadrul prezentei lucrari au fost realizate urmatoarele etape:

- Relevee ale intersectiilor rutiere ce fac obiectul studiului.
- Evaluari asupra desfasurarii traficului de vehicule in intersectie.

- Prelucrarea statistica a datelor de trafic preluate din recensamantul de circulatie - anul 2015.
- Realizarea modelelor de trafic al circulatiei rutiere existente pentru dimineata (AM) si pentru dupa amiaza (PM).
- Realizarea modelelor de trafic ale circulatiei rutiere dupa finalizarea investitiilor – extinderea partii carosabile a strazii Institutului si realizarea investitiilor propuse prin planurile de urbamism zonal mentionate in paragrafele anterioare.
- Realizarea modelelor de trafic pentru debitele de perspectiva – 20 ani.
- Realizarea modelelor de trafic pentru evidentierea limitelor de capacitate de circulate pentru intersectiile din zona analizata, in ipoteza in care circulatia se doreste a se desfasura in conditii corespunzatoare - *estimari ale debitelor limita*.
- Analize si evaluari comparative.
- Redactarea referatului studiului de trafic - concluzii si recomandari.

1.3. Date sintetice folosite pentru delimitarea zonei de studiu.

1.3.1. Amplasarea in teritoriu

In conformitate cu Planul de Mobilitate Urbana Durabila al Municipiului Brașov, rețeaua rutiera a municipiului este structurata pe o serie de categorii de strazi cu functiuni distincte.

Din punct de vedere al tramei stradale remarcam ca aceasta este determinata de evolutia istorica a orasului. In zonele centrale, identificam un tesut urban neregulat, cu strazi inguste, cu o geometrie neomogena, traseele orientate in principal catre pietele centrale. Dezvoltarea orasului a adaugat in timp, artere noi, ce se conectează la secțiunea radială interioară și exterioară din jurul centrului orașului. Geografia locală a orasului a influențat modul de poziționare a dezvoltărilor și în consecință rețeaua rutiera a folosit văile si platourile din apropiere.

Rețeaua de străzi a orașului Brașov combină traseele radiale cu arterele de penetratie dinspre drumurile nationale sau judetene catre zona centrala. Remarcam de asemenea faptul ca străzile orasului au un caracter „liniar", multe dintre dezvoltarile imobiliare au fost realizate in timp, in lungul traseelor rutiere. Municipiul Brașov are o retrea rutiera importanta ce insumeaza o lungime de 377km.

In conformitate cu datele cuprinse in Planul de Mobilitate Urbana Durabila reteaua rutiera este împărțita pe următoarele categorii:

- Categoria I - drumuri nationale Europene -18km
- Categoria II - drumuri naționale -19km
- Categoria III - drumuri județene - 79km
- Categoria IV - drumuri rurale - 97km

Rețeaua de drumuri strategice

Rețeaua de drumuri strategice ce servește Municipiul Braşov include drumuri europene, naționale și județene:

- DN1 / E60 (asigura legătura între Predeal și Braşov, Ghimbav și Codlea via București și Ploiești)
- DN1A (asigura legătura între Brașov și Săcele via Ploiești)
- DN1E (asigura legătura între Râșnov și Brașov via Poiana Braşov)
- DN11 (asigura legătura între Braşov și Hărman, după care se intersectează cu E578 și E574, precum și DN10 cu Prejmer)
- DN12 (se intersecteaza cu DN11 la limita zonei metropolitane)
- DN73 (asigura legătura între Brașov și Pitești via Cristian și Râșnov)
- DN73A (asigura legătura cu DN1 între Predeal și Șercaia via Râșnov și Zărnești)
- DN73B (asigura legatura dintre DN73A cu DN1 via Cristian și Ghimbav);
- E574 (reprezinta o legatura rutiera cu functie de centură în zona de nord a Municipiului Braşov).

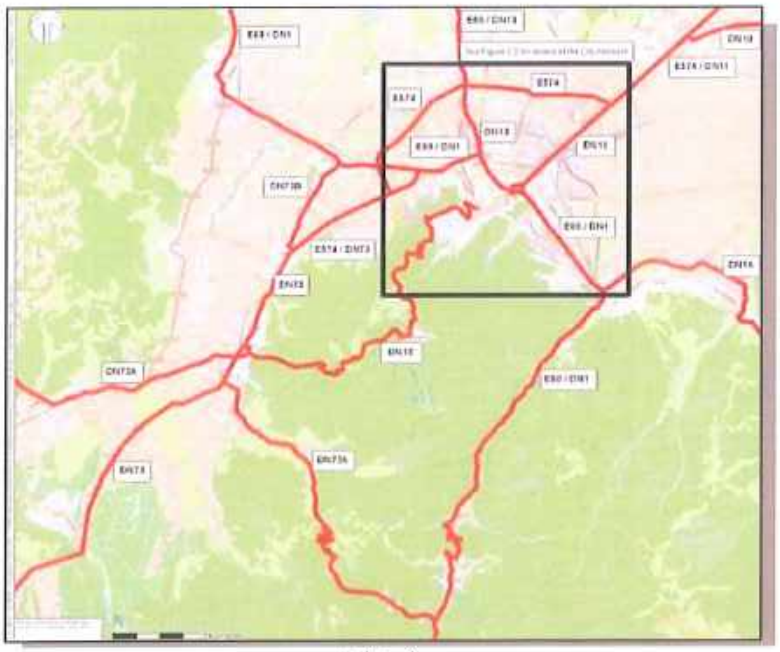

Fig. 1
Rețeaua de drumuri strategice ce servește Municipiul Brașov
[P.M.U.D. Mun. Brasov – 2017 – fig 2.11]

Accesul in Municipiul Brașov se poate realiza prin: Calea București (DN1 / E60), Calea Făgărașului (E68), Strada Griviței (E60) și Strada Hărmanului (DN11).

În plus față de aceste artere rutiere, reiese din observații că există o serie de alte trasee principale în orașul Brașov ce includ:

- Bulevardul Eroilor, Bulevardul 15 Noiembrie, Strada Iuliu Maniu și Strada Nicolae Iorga. Acestea fac parte din sistemul cu sensuri unice din centrul orașului.
- Strada Lungă și Strada de Mijloc asigura legătura rutiera între centrul istoric și Strada Hărmanului).
- Bulevardul Saturn, Bulevardul Alexandru Vlahuță, Bulevardul Gării și Strada Aurel Vlaicu formeaza la nivelul orasului o șosea de centură interioară, ce conectează zone cheie de activitate, inclusiv gara.
- Bulevardul Victoriei asigura legătura rutiera dintre șoseaua de centură interioară menționată mai sus și E60.

- Șoseaua Cristianului asigura legătura rutiera dintre DN73 de la intrarea în Brașov și E68 (Calea Făgărașului).
- Strada 13 Decembrie asigura legătura dintre E60 și E574 (artera rutiera cu functie de centură în zona de nord a Municipiului Braşov).
- Strada Zizinului (asigura intrarea în oraș din partea de est.

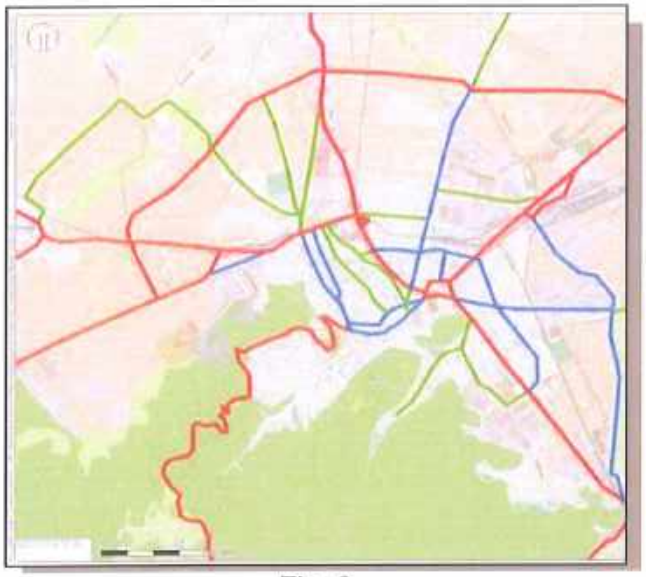

Fig. 2
Rețeaua de drumuri principale și secundare din Municipiul Braşov
[P.M.U.D. Mun. Brasov – 2017 – fig 2.12]

Zona rutiera propusa pentru analiza de trafic cuprinde strada Institutului pe tronsonul cuprins între pasajul CF şi Centura ocolitoare a municipiului Brasov. Analiza de trafic se axeaza in principal pe solicitarea administratratiei locale de a studia posibilitatea lărgirii părţii carosabile existente a străzii Institutului de la 2 benzi de circulatie la 4 benzi de circulatie pe zona mentionata mai sus.

In figura 3 este prezentata zona ce cuprinde traseele rutiere supuse analizei de trafic.

Fig. 3
Traseul strazii Institutului supus analizei de trafic

1.3.2. Caracteristici ale zonei urbane analizate

In conformitate cu datele transmise de beneficiar, in cadrul prezentului studiu de trafic au fost analizate caracteristicile retelei rutiere propuse prin planurile de reglementari urbanistice prevazute in studiile de urbanism anterioare precum si date asupra conditiilor de desfasurare a circulatiei rutiere. In figura 4 este prezentata zona urbana in care este amplasat traseul strazii Institutului.

Strada Institutului este amplasata in intravilanul municipiului Brasov. Terenul, conform extrasului CF nr. 124110, este in domeniul pivat si domeniul public al municipiului Brasov si are o lungime de aproximativ 1600m. Folosinta actuala a terenului este de drum si teren arabil, iar destinatia stabilita si aprobata prin planurile de urbanism si amenajare a teritoriului va fi de strada cu 4 benzi de circulatie, zona de interes public.

Fig. 4
Schema retelei rutiere analizate
[P.U.Z. "DN1 drumul de acces la Institutul Cartofului si centura ocolitoare mun. Brasov"]

In fig. 5, 6, 7 sunt prezentate imagini ale amplasamentului traseului strazii Institutului.

Fig 5 – Intersectia: str. Fanarului – str. Institutului – DN73
[Google Earth 2020]

Fig 6 – Plan de ansamblu al traseului strazii Institutului
[Google Earth 2020]

Fig 7 – Nod rutier: DN1 – DN73 – str. Fanarului - Str. Institutului
[Google Earth 2020]

Fig 8 – Pasaj denivelat: Str. Institutului – Centura ocolitoare mun. Brasov
[Google Earth 2020]

1.3.3. Investigatii asupra traficului rutier

In vederea intocmirii studiului de trafic in cadrul prezentei lucrari, s-a realizat un program de investigatii asupra deplasarilor vehiculelor in intersectiile de pe retea.

Programul de masuratori s-a realizat pe baza planului de situatie al arterei rutiere, pus la dispozitie de beneficiar. In vederea modelarii retelei rutiere s-au intocmit releveele alcatuirii geometrice a tuturor intersectiilor analizate. Cu aceasta ocazie au fost codificate intersectiile. In fig. 9 si in plansa A este prezentat planul de situatie al arterei analizate si codificarea intersectiilor investigate.

Fig 9 – Numerotarea intersectiilor

Programul investigatiilor asupra deplasarilor de vehicule in intersectii cuprinde un set de masuratori realizate sub forma sondajelor de trafic. Pentru realizarea masuratorilor de trafic au fost alese intersectiile reprezentative existente din zona analizata.

Intersectiile in care au fost efectuate sondaje de trafic sunt:

- Centura ocolitoare a municipiului Brasov – Acces Centru Comercial Hornbach (intersectia 13),
- Str. Institutului - Str. Fanarului (intersectia 101),
- Str. Fanarului - DN 73 (str. Curmaturii) (intersectia 9),
- Str. Institutului - Str. Egretei (intersectia 8).

Pentru realizarea masuratorilor au fost alese zile lucratoare in periodada 19–23 iulie 2020. Intervalul orar in care au fost inregistrate debitele de trafic corespund distributiei zilnice a traficului in care se identifica in mod curent valori ridicate: dimineata (AM) in intervalul orar 7.00 – 9.00 si dupa-amiaza (PM) in intervalul orar 15.00 – 17.00. Debitele orare au fost masurate pe categorii de vehicule si au fost echivalate in vehicule etalon turisme (v.e.t.), folosindu-se in acest sens valorile coeficientilor de echivalare prevazuti in normativul AND 584/2012 – tabel 4 (*Normativ pentru determinarea traficului de calcul pentru proiectarea drumurilor din punct de vedere al capacitatii portante si al capacitatii de circulatie*). In anexa A sunt prezentate valorile debitelor inregistrate dimineata (AM) si dupa amiaza (PM).

2. ANALIZA DESFASURARII TRAFICULUI DE VEHICULE IN INTERSECTII

2.1. Utilizarea tehnicii informationale in studiile de trafic

Realizarea unui transport eficient necesita in permanenta o atenta analiza si o evaluare asupra modului in care se desfasoara deplasarile. Utilizarea tehnicii informationale, a programelor specializate pentru domeniul ingineriei de trafic, reprezinta un domeniu de activitate cu multiple avantaje pe planul analizei si optimizarii solutiilor de transport. In acest sens, semnalam posibilitatea de a realiza analize ale modului in care se desfasoara traficul rutier folosind *conceptul de modelarea numerica*. Aceasta abordare ofera specialistilor posibilitatea modelarii pe calculator a retelelor rutiere urbane (artere si intersectii) prin generarea elementelor geometrice si declararea in intersectii a valorilor de trafic pentru care se doreste studiul de trafic.

Alegerea programelor de calcul necesita pe de o parte, cunoasterea cerintelor beneficiarului (conditii de tema, restrictii ale normelor tehnice), iar pe de alta parte, evaluarea in detaliu a performantelor programelor de calcul ce vor fi folosite ca instrumente de lucru. Programele de calcul care sunt folosite in domeniul studiilor de trafic, ofera posibilitatea realizarii de analize dinamice, in

timp real, asupra variantelor propuse pentru analiza. In aceste conditii, remarcam faptul ca specialistul are la indemana un instrument de analiza, atat sub aspectul realizarii de modele de trafic, cat si sub aspectul optimizarii solutiilor pentru circulatia pe retele rutiere urbane.

Utilizarea conceptului de modelare numerica a desfasurarii traficului rutier ofera o serie de avantaje:

- sistematizarea si gestionarea datelor de trafic inregistrate din masuratori;
- realizarea de modele de trafic pentru valori actuale ale traficului de vehicule;
- formularea unor estimari asupra desfasurarii circulatiei in intersectii;
- realizarea unor variante de optimizare a desfasurarii traficului.

2.2. Consideratii asupra desfasurarii traficului de vehicule in zona analizata.

Studiile de trafic analizeaza deplasarea vehiculelor pe retele rutiere sub forma fluxurilor de trafic. Din acest punct de vedere se constata ca traficul rutier se poate desfasura in *"flux continuu"* (fara opriri sau intarzieri) sau sub forma de *"flux intrerupt"*. In practica, prima categorie de trafic corespunde deplasarilor in afara localitatilor, pe drumuri sau autostrazi. Categoria a doua (flux intrerupt) reprezinta situatia desfasurarii traficului in mediul locuit. In concordanta cu cele aratate mai sus, rezulta ca traficul urban in cea mai mare parte, este caracterizat prin modele matematice care se inscriu in teoria de calcul a fluxului intrerupt. Fragmentarea deplasarilor de vehicule pe artere rutiere urbane este determinata de prezenta intersectiilor si de prezenta trecerilor de pietoni. In acest mod se poate intelege ca deplasarea vehiculelor prin intersectii determina o limitare a timpului in care un flux de circulatie poate traversa intersectia in decursul unitatii de timp (ora).

Avand in vedere aceste consideratii, cu caracter teoretic general, in cadrul prezentului studiu de trafic au fost analizate cu prioritate conditiile de

desfasurare a traficului de vehicule in intersectiile de pe traseul strazii Institutului evidentindu-se prin modelarea numerica parametrii principali ce caracterizeaza deplasarile de vehicule. Parametrii utilizati in analize sunt:

- *Indicele de Utilizare a Capacitatii (I.C.U.)* calculat in conformitate cu manualul «Intersection Capacity Utilization » elaborat de Trafficware Company – U.S.A., dezvoltatoarea aplicatiilor Synchro si SimTraffic.
- *Nivelul de serviciu (LOS)* in intersectii calculat cf. manualului «Intersection Capacity Utilization» elaborat de Trafficware Company – U.S.A.
- Intarzieri medii ale vehiculelor in intersectie.
- Intarzieri medii ale vehiculelor ce sunt obligate sa opresca in intersectie.
- Numar mediu de opriri in intersectie.
- Viteza medie de deplasare a vehiculelor.

Desfasurarea deplasarilor de vehicule in intersectie a fost analizata sub aspectul identificarii posibilelor obstacole ce jeneaza desfasurarea acestuia, influentand prin obstructionare sau prin limitarea sectiunii transversale a partii carosabile.

2.3. Debite de trafic si prelucrarea datelor

2.3.1. Traficul de calcul pe centura ocolitoare a municipiului Brasov

In vederea intocmirii studiului de trafic in cadrul prezentei lucrari, proiectantul a pus la dispozitie datele de trafic cuprinse in recensamantul de circulatie realizat in anul 2015. Datele ofertite de recensamantul de circulatie, evidentiaza debitele de trafic de pe Centura ocolitoare Brasov pe sectorul de drum analizat sub forma mediei zilnice anuale MZA. Consultand datele cuprinse in recensamantul de circulatie constatam ca intersectia analizata este amplasata in zona acoperita de postul de recensamant nr. 751 la km 18+100. Postul de recensamant mentionat mai sus acopera sectorul rutier cuprins intre limitele DN13 - DN1 (Km 12+988 – Km 19+412). Pe acest sector Centura ocolitoare

Brasov este incadrata in categoria drum european, fapt ce determina calcularea traficului de perspectiva pentru o durata de 20 ani.

Datelor de trafic furnizate evidentiaza traficul estimat pentru perioade de perspectiva in ipoteza cresterii medii a debitelor. In tabelul 1 sunt prezentate debitele de trafic aferente postului de recensamant 751 – trafic actual si de perspectiva.

Tabel 1

RECENSĂMÂNTUL GENERAL DE CIRCULAȚIE PE DRUMURILE PUBLICE DIN ANUL 2015 (MZA)

Trafic an baza

Cod unitate	Nr. post	Nr. drum	Poziție km post	Limite sector(km)		Lungime sector	Biciclete, motociclete	Autoturisme	Microbuze cu max 8+1 locuri	Autocamionete și autospeciale cu MTMA <=3,5 tone	Autocamioane și derivate cu doua axe	Autocamioane și derivate cu trei sau patru axe	Autovehicule articulate(tip TIR), remorchere cu trailer, vehicule cu peste 4 axe	Autobuze și autocare	Tractoare cu/fără remorcă, vehicule speciale	Autocamioane cu 2, 3 sau 4 axe, cu remorci (tren rutier)	Vehicule cu tracțiune animală	Total vehicule	Limite sector	Cod secție
				de la	la															
5	751	VOB2	18.100	12.988	19.412	6.424	26	3511	413	469	327	812	748	102	2	58	0	5868	DN13 - DN1	11
Coef echivalare: veh fizice - veh etalon turisme							0.5	1.0	1.0	1.0	1.5	1.5	1.5	1.5	1.5	1.5	3.0			
MZA - v.e.t.							13	3511	413	469	490.5	468	1122	153	3	87	0	6729.5		
Debit mediu orar																		497		
Coef mediu de crestere 2020-2040 - drumuri europene							1.23	1.58	1.45	1.52	1.23	0.99	1.97	2.62	0.94	0.97	0.61	1.60		

Trafic perspectiva

Cod unitate	Nr. post	Nr. drum	Poziție km post	Limite sector(km)		Lungime sector	Biciclete, motociclete	Autoturisme	Microbuze cu max 8+1 locuri	Autocamionete și autospeciale cu MTMA <=3,5 tone	Autocamioane și derivate cu doua axe	Autocamioane și derivate cu trei sau patru axe	Autovehicule articulate(tip TIR), remorchere cu trailer, vehicule cu peste 4 axe	Autobuze și autocare	Tractoare cu/fără remorcă, vehicule speciale	Autocamioane cu 2, 3 sau 4 axe, cu remorci (tren rutier)	Vehicule cu tracțiune animală	Total vehicule	Limite sector	Cod secție
				de la	la															
5	751	VOB2	18.100	12.988	19.412	6.424	32	5530	599	713	402	309	1470	267	2	56	0	9549	DN13 - DN1	11
Coef echivalare: veh fizice - veh etalon turisme							0.5	1.0	1.0	1.0	1.5	1.5	1.5	1.5	1.5	1.5	3.0			
MZA - v.e.t.							16	5530	599	713	603	463	2205	401	3	84	0	10617		
Debit mediu orar																		784		

Pentru debitele orare de calcul aferente drumului national s-au utilizat prevederile Normativului 584/2012 – "*Normativ pentru determinarea traficului de calcul pentru proiectarea drumurilor din punct de vedere al capacitatii portante si al capacitatii de circulatie*".

Formula de calcul pentru debitul orar de calcul este specificata in capitolul IV art.23 – alin. 2.

$Q_c = MZA_E \times K \times D / Fv$

in care:

- Q_c – debitul orar de calcul pentru drumurile cu 4 benzi de circulatie.
- MZA_E – intensitatea medie zilnica anuala a traficului in ambele sensuri de circulatie exprimat in vehicule etalon turisme / 24 ore.
- K – coeficient reprezentand raportul dintre debitul orar corespunzator celei de a 50-a ora de varf si MZA_E.
- D – ponderea traficului de pe sensul de circulatie cel mai incarcat din debitul orar de calcul din traficul in sectiune.
- F_v – factorul orei de varf.

Valorile debitelor orare de calcul pentru VO1K sunt:

Anul 2020

$Q_c = MZA_{2020} \times K / Fv = 6729 \times 0.1 \times 0.65 / 0.88 = 497$ v.e.t.

Anul 2040

$Q_c = MZA_{2040} \times K / Fv = 10617 \times 0.1 \times 0.65 / 0.88 = 784$ v.e.t.

2.3.2. Traficul de calcul generat/atras de viitoarele investitii prevazute in documentatiile de urbanism aferent zonei urbane analizate.

Pentru stabilirea debitelor de trafic generate/atrase de viitoarele investitii prevazute din zona, s-a utilizat metoda de calcul stabilita de "*Institute of Transportation Engineering*" (I.T.E.) din Statele Unite ale Americii.

Metoda pe calcul "Trip Generation".

Aceasta metoda de calcul estimeaza numarul deplasarilor atrase/generate de o anumita dezvoltare urbana in functie de datele cuprinse in baza de date pe care

o detine manualul "*Trip Generation*". Informatiile cuprinse in baza de date reprezinta rezultate a sute de studii de trafic realizate in timp, de "*Institute of Transportation Engineering*" (I.T.E.) din Statele Unite ale Americii. In principiu, metoda de calcul ia in considerare deplasarile generate/atrase de diferite tipuri de functiuni urbane. Observatiile rezultate din studiile de trafic au fost analizate statistic si pe baza acestora s-au stabilit valorile procentuale pentru deplasarile ce acceseaza respectivele amenajari urbane. Utilzand aceasta metoda de calcul se pot estima numarul de deplasari pentru traficul de dimineata (AM) respectiv pentru traficul de dupa amiaza (PM).

Metoda de calcul poate fi utilizata apeland la: modul specializat al aplicatiei Synchro 10, ce utilizeeaza manualul "*Trip Generation-V9*", sau folosind spreadsheet-urile de lucru realizate de "*Spack Consulting*" ca open-source. In tabelul 2 este prezentat pentru exemplificare spreadsheetul utilizat.

Tabelul 2

ITE Trip Generation Rates - 8th Edition
Pass-by rates from ITE Trip Generation Handbook - 2nd Edition
(copyrights, Insitute of Transportation Engineers)

Enter Expected Unit Volumes into Column 'M'
Notes on Color Coding at Bottom

Description/ITE Code	Units	ITE Vehicle Trip Generation Rates (peak hours are for peak hour of adjacent street traffic unless highlighted)								Expected Units	Total Generated Trips			Total Distribution of Generated Trips					
		Weekday	AM	PM	Pass-By	AM In	AM Out	PM In	PM Out		Daily	AM Hour	PM Hour	AM In	AM Out	Pass-By	PM In	PM Out	Pass-By
Low Rise Apartment 221	Occ.DU	6.59	0.46	0.58		21%	79%	65%	35%		0	0	0	0	0	0	0	0	0
High Rise Apartment 222	DU	4.20	0.30	0.35		25%	75%	61%	39%	3772.0	15,842	1,132	1,320	283	849	0	805	515	0
Mid-Rise Apartment 223	DU	NA	0.30	0.39		31%	69%	58%	42%		0	0	0	0	0	0	0	0	0
Rental Townhouse 224	DU	NA	[illegible]	[illegible]		33%	67%	51%	49%		0	0	0	0	0	0	0	0	0
Resd. Condo/Townhouse 230	DU	5.81	0.44	0.52		17%	83%	67%	33%		0	0	0	0	0	0	0	0	0
Resd. Condo/Townhouse 230	Persons	2.49	0.15	0.24		16%	84%	67%	33%		0	0	0	0	0	0	0	0	0
Resd. Condo/Townhouse 230	Vehicles	3.34	0.24	0.32		16%	84%	66%	34%		0	0	0	0	0	0	0	0	0
Low Rise Resd. Condo 231	DU	NA	[illegible]	[illegible]		25%	75%	58%	42%		0	0	0	0	0	0	0	0	0

Retinem ca utilizarea metodei de calcul "*Trip Generation*" *stabileste numarul de deplasari generate/atrase de o constructie*. Subliniem faptul ca numarul de deplasari calculate cu metoda mentionata mai sus, se refera la numarul de persoane ce acceseaza constructia. Aceste deplasari calculate nu trebuie confundate cu valori ale debitelor traficului rutier ce ar putea fi folosite in modelarea numerica.

In tabelul 3 sunt prezintate debitele de calcul estimate cu metoda "*Trip Generation*". Tabelul contine numarul de deplasari generate/atrase de viitoarele investitii, atat dimineata AM cat si si dupa amiaza PM.

Tabel 3

Stabilirea numarului de deplasari generate/atarse de viitoarele dezvoltari imobiliare propuse in planurile de urbanism

Nr. crt.	Zona	Functiuni urbane	Numar blocuri	Numar nivele	Numar scari	Numar apartamente / scara	Numar apartamente	unitati masura	Cod ITE	Deplasari AM				Deplasari PM				Deplasari cu autoturismul (cf. PMUD)*	Trafic AM		Trafic PM	
										in		out		in		out						
										%	valoare	%	valoare	%	valoare	%	valoare		in	out	in	out
1	Zona 1	locuire	3	10	2	4	240	apart.	Resd. Condo/Townhouse 230	17%	40.8	83%	199.2	67%	160.8	33%	79.2	28.40%	12	57	46	22
2	Zona 2	locuire	4	10	2	4	320	apart.		17%	54.4	83%	265.6	67%	214.4	33%	105.6	28.40%	15	75	61	30
3	Zona 3	locuire	4	10	2	4	320	apart.		17%	54.4	83%	265.6	67%	214.4	33%	105.6	28.40%	15	75	61	30
4	Zona 4	locuire	4	11	2	4	352	apart.		17%	59.84	83%	292.16	67%	235.84	33%	116.16	28.40%	17	83	67	33
5	Zona 5	locuire	4	12	2	4	384	apart.		17%	65.28	83%	318.72	67%	257.28	33%	126.72	28.40%	19	91	73	36
6	Zona 6	locuire	3	11	1	4	132	apart.		17%	22.44	83%	109.56	67%	88.44	33%	43.56	28.40%	6	31	25	12
7	Zona 7	locuire	3	12	2	4	288	apart.		17%	48.96	83%	239.04	67%	192.96	33%	95.04	28.40%	14	68	55	27
8	Zona 8	locuire	2	12	2	4	192	apart.		17%	32.64	83%	159.36	67%	128.64	33%	63.36	28.40%	9	45	37	18
9	Zona 9	locuire	2	12	2	4	192	apart.		17%	32.64	83%	159.36	67%	128.64	33%	63.36	28.40%	9	45	37	18
10	Zona 10	locuire	3	9	2	4	216	apart.		17%	36.72	83%	179.28	67%	144.72	33%	71.28	28.40%	10	51	41	20
11	Zona 11	locuire	4	9	1	4	144	apart.		17%	24.48	83%	119.52	67%	96.48	33%	47.52	28.40%	7	34	27	13
12	Zona 12	locuire	8	12	2	4	768	apart.		17%	130.56	83%	637.44	67%	514.56	33%	253.44	28.40%	37	181	146	72
13	Zona 13	locuire	7	8	1	4	224	apart.		17%	38.08	83%	185.92	67%	150.08	33%	73.92	28.40%	11	53	43	21
14	Zona 14	locuire	8	12	2	4	768	apart.		17%	130.56	83%	637.44	67%	514.56	33%	253.44	28.40%	37	181	146	72
Total PUZ							3772				472.6		2307.4		1862.6		917.4		134	655	529	261

Deasemeni in tabelul 3 au fost introduse date cu privire la viitoarele constructii prevazute in "*Plansa de Reglementari Urbanistice*" ale P.U.Z.-urilor considerate. Plansa de urbanism a fost impartita in zone separate de constructii delimitate de arterele interioare (strada 1, strada 2, ... etc).

In figura 10 este prezentata zonificarea ariei cu viitoarele constructii.

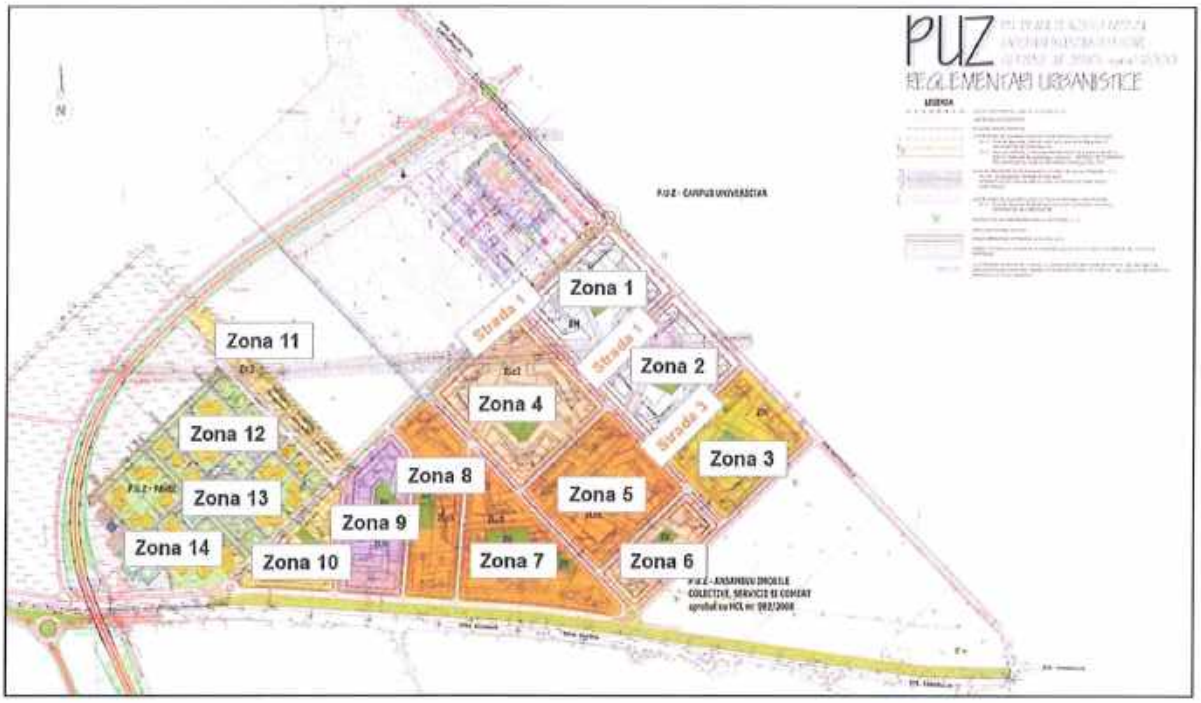

Fig. 10 – Zonificarea ariei cu viitoarele constructii

In tabelul 3 s-au avut in vedere informatiile cuprinse in *Planul de Mobilitate Urbana Durabila Brasov – 2017,* ce evidentiaza procentul de utilizare a turismului pentru efectuarea deplasarilor zilnice. In figura 11 este prezentat graficul distributiei modale deplasarilor zilnice in municipiul Brasov. Pe baza acestor date a fost calculat procentul total al de plasarilor cu autoturismul – tabel 4.

Figura 3.14 Distribuția modală a deplasărilor raportate

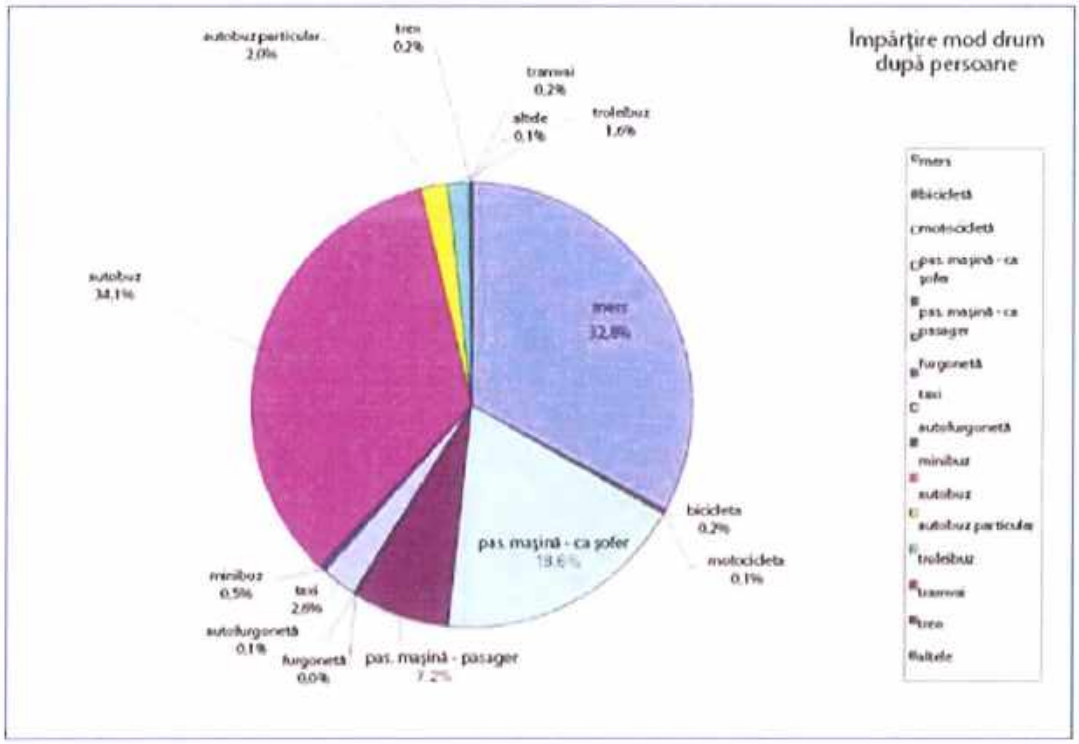

Fig. 11 – Distributia modala a deplasarilor zilnice in municipiul Brasov
[*Planul de Mobilitate Urbana Durabila Brasov*]

Tabel 4

Deplasari cu autoturismul (cf. PMUD)

Turism sofer	18.6%
Turism pasager	7.2%
Taxi	2.6%
Total	**28.4%**

3. STUDII ASUPRA DESFASURARII TRAFICULUI DE VEHICULE

3.1. Modele ale desfasurarii traficului de vehicule

Analiza desfasurarii deplasarilor in intersectii s-a realizat prin modelare numerica. In acest sens au fost realizate modele ale traficului bazate pe valorile debitelor de trafic calculate la paragraful 2.3.

Analiza de trafic realizata are urmatoarea structura de modele:

- ***Modelul 1*** *– circulatia rutiera existenta AM.*
- ***Modelul 2*** *– circulatia rutiera existenta PM.*
- ***Modelul 3*** *– circulatia rutiera estimata dupa largirea str. Institutului si luand in considerare efectul traficului generat / atras de investitiile imobiliare – AM.*
- ***Modelul 4*** *– circulatia rutiera estimata dupa largirea str. Institutului si luand in considerare efectul traficului generat / atras de investitiile imobiliare - PM*
- ***Modelul 5*** *– circulatia rutiera estimata dupa largirea strazii Institutului pentru perioada de perspectiva (anul 2040), luand in considerare efectul traficului generat / atras de investitiile imobiliare – AM.*
- ***Modelul 6*** *– circulatia rutiera estimata dupa largirea strazii Institutului pentru perioada de perspectiva (anul 2040), luand in considerare efectul traficului generat / atras de investitiile imobiliare - PM*
- ***Modelul 7*** *– circulatia rutiera estimata dupa largirea strazii Institutului pentru* evidentierea limitelor capacitatii de circulatie a intersectiilor din zona analizata, in ipoteza in care aceasta se doreste a se desfasura in conditii corespunzatoare - estimari ale debitelor limita – *AM.*
- ***Modelul 8*** *– circulatia rutiera estimata dupa largirea strazii Institutului pentru* evidentierea limitelor capacitatii de circulatie a intersectiilor din zona analizata, in ipoteza in care aceasta

se doreste a se desfasura in conditii corespunzatoare - estimari ale debitelor limita – *PM*.

Pentru realizarea modelelor de trafic au fost introduse ca date de lucru particularitatile drumurilor existente pe teren.

- numar de benzi identificate pe teren si directiile de deplasare pentru fiecare acces;
- caracteristicile geometrice ale acceselor;
- semnalizarea rutiera verticala existenta.

3.2. Structura a rezultatelor – planse – anexe

Rezultatele obtinute din simularea numerica sunt prezentate sub doua paliere de analiza: reprezentari grafice ale indicatorilor ce caracterizeaza deplasarile (planse desenate) si tabele de valori calculate, ale parametrilor de analiza (piese scrise – anexe).

3.2.1. Modelul 1 – *circulatia rutiera existenta - echivalenta anului 2020 - AM,* prezinta situatia circulatiei rutiere existenta in concordanta cu valorile debitelor stabilite in paragraful 2.3.

Rezultatele obtinute din modelare sunt evidentiate astfel:

- In plansa 1 sunt aratate valorile debitelor de calcul pentru fiecare acces in intersectii, precum si valorile indicilor de utilizare a capacitatii in intersectii.
- In anexa 1 sunt prezentati in detaliu toti parametrii calculati in cadrul modelarii traficului. Rapoartele prezentate cuprind rezultatele modelarii folosind programul *"Synchro"* si rezultatele obtinute in cadrul simularii numerice utilizand aplicatia *"SimmTraffic"*.

3.2.2. Modelul 2 – *circulatia rutiera existenta - echivalenta anului 2020 - PM,* prezinta situatia circulatiei rutiere existenta in concordanta cu valorile debitelor stabilite in paragraful 2.3.

Rezultatele obtinute din modelare sunt evidentiate astfel:

- In plansa 2 sunt aratate valorile debitelor de calcul pentru fiecare acces in intersectii, precum si valorile indicilor de utilizare a capacitatii in intersectii.
- In anexa 2 sunt prezentati in detaliu toti parametrii calculati in cadrul modelarii traficului. Rapoartele prezentate cuprind rezultatele modelarii folosind programul *"Synchro"* si rezultatele obtinute in cadrul simularii numerice utilizand aplicatia *"SimmTraffic"*.

- ***Modelul 3*** – *circulatia rutiera estimata dupa largirea str. Institutului si luand in considerare efectul traficului generat / atras de investitiile imobiliare – AM* prezinta situatia circulatiei rutiere existente in concordanta cu valorile debitelor stabilite in paragraful 2.3.

Rezultatele obtinute din modelare sunt evidentiate astfel:

- In plansa 3 sunt aratate valorile debitelor de calcul pentru fiecare acces in intersectii, precum si valorile indicilor de utilizare a capacitatii in intersectii.
- In anexa 3 sunt prezentati in detaliu toti parametrii calculati in cadrul modelarii traficului. Rapoartele prezentate cuprind rezultatele modelarii folosind programul *"Synchro"* si rezultatele obtinute in cadrul simularii numerice utilizand aplicatia *"SimmTraffic"*.

- ***Modelul 4*** – *circulatia rutiera estimata dupa largirea str. Institutului si luand in considerare efectul traficului generat / atras de investitiile imobiliare - PM* prezinta situatia circulatiei rutiere existente in concordanta cu valorile debitelor stabilite in paragraful 2.3.

Rezultatele obtinute din modelare sunt evidentiate astfel:

- In plansa 4 sunt aratate valorile debitelor de calcul pentru fiecare acces in intersectii, precum si valorile indicilor de utilizare a capacitatii in intersectii.

- In anexa 4 sunt prezentati in detaliu toti parametrii calculati in cadrul modelarii traficului. Rapoartele prezentate cuprind rezultatele modelarii folosind programul *"Synchro"* si rezultatele obtinute in cadrul simularii numerice utilizand aplicatia *"SimmTraffic"*.

3.2.3. **Modelul 5** – *circulatia rutiera estimata dupa largirea strazii Institutului pentru perioada de perspectiva (anul 2040), luand in considerare efectul traficului generat / atras de investitiile imobiliare – AM.*

Rezultatele obtinute din modelare sunt evidentiate astfel:

- In plansa 5 sunt aratate valorile debitelor de calcul pentru fiecare acces in intersectii, precum si valorile indicilor de utilizare a capacitatii in intersectii.
- In anexa 5 sunt prezentati in detaliu toti parametrii calculati in cadrul modelarii traficului. Rapoartele prezentate cuprind rezultatele modelarii folosind programul *"Synchro"* si rezultatele obtinute in cadrul simularii numerice utilizand aplicatia *"SimmTraffic"*.

3.2.4. **Modelul 6** – *circulatia rutiera estimata dupa largirea strazii Institutului pentru perioada de perspectiva (anul 2040), luand in considerare efectul traficului generat / atras de investitiile imobiliare - PM*

Rezultatele obtinute din modelare sunt evidentiate astfel:

- In plansa 6 sunt aratate valorile debitelor de calcul pentru fiecare acces in intersectii, precum si valorile indicilor de utilizare a capacitatii in intersectii.
- In anexa 6 sunt prezentati in detaliu toti parametrii calculati in cadrul modelarii traficului. Rapoartele prezentate cuprind rezultatele modelarii folosind programul *"Synchro"* si rezultatele obtinute in cadrul simularii numerice utilizand aplicatia *"SimmTraffic"*.

3.2.5. ***Modelul 7*** – *circulatia rutiera estimata dupa largirea strazii Institutului.*

Acest model evidentiaza limitele capacitatii de circulatei a intersectiilor din zona analizata, in ipoteza in care circulatia se doreste a se desfasura in conditii corespunzatoare - estimari ale debitelor limita – AM.

Rezultatele obtinute din modelare sunt evidentiate astfel:

- In plansa 7 sunt aratate valorile debitelor de calcul pentru fiecare acces in intersectii, precum si valorile indicilor de utilizare a capacitatii in intersectii.
- In anexa 7 sunt prezentati in detaliu toti parametrii calculati in cadrul modelarii traficului. Rapoartele prezentate cuprind rezultatele modelarii folosind programul *"Synchro"* si rezultatele obtinute in cadrul simularii numerice utilizand aplicatia *"SimmTraffic"*.

4. ***Modelul 8*** – *circulatia rutiera estimata dupa largirea strazii Institutului.*

Acest model evidentiaza limitele capacitatii de circulatei a intersectiilor din zona analizata, in ipoteza in care circulatia se doreste a se desfasura in conditii corespunzatoare - estimari ale debitelor limita – PM.

Rezultatele obtinute din modelare sunt evidentiate astfel:

- In plansa 8 sunt aratate valorile debitelor de calcul pentru fiecare acces in intersectii, precum si valorile indicilor de utilizare a capacitatii in intersectii.
- In anexa 8 sunt prezentati in detaliu toti parametrii calculati in cadrul modelarii traficului. Rapoartele prezentate cuprind rezultatele modelarii folosind programul *"Synchro"* si rezultatele obtinute in cadrul simularii numerice utilizand aplicatia *"SimmTraffic"*.

3.3. Analiza rezultatelor obtinute in cadrul simularii numerice

Modelarea desfasurarii traficului de vehicule, precum si evaluarea rezultatelor obtinute se realizeaza prin analiza pe doua paliere:

- analiza parametrilor ce caracterizeaza modelul de trafic. Acest set de informatii este furnizat de programul de modelare Synchro.
- analiza rezultatelor obtinute in urma simularii numerice a desfasurarii deplasarilor realizata cu ajutorul aplicatiei SimTraffic.

Grupul de rezultate obtinute din calcule exprima aplicarea principiilor de calcul si a formularilor matematice cuprinse in Manualul de Capacitate (Higway Capacity Manual). Acest document unanim recunosut in domeniul ingineriei de trafic a fost realizat de organismul tehnic american denumit *"Transportation Researach Board"*, membru al *"National Academy"* - U.S.A.

In cadrul prezentului studiu de trafic, principalii parametrii retinuti pentru analiza desfasutarii traficului sunt:

Synchro:

- *Indicele de Utilizare a Capacitatii (I.C.U.)* calculat in conformitate cu manualul «Intersection Capacity Utilization » elaborat de Trafficware Company – dezvoltatoare aplicatiilor Synchro si SimTraffic.
- *Nivelul de serviciu in intersectii* (LOS) calculat cf. manualului «Intersection Capacity Utilization » elaborat de Trafficware Company – U.S.A.

SimTraffic:

- *Intarzieri medii ale vehiculelor in intersectie.*
- *Intarzieri medii ale vehiculelor ce sunt obligate sa opresca in intersectie.*
- *Numar mediu de opriri in intersectie.*
- *Viteza medie de deplasare a vehiculelor.*

Rezultatele complete obtinute din simularea numerica sunt prezentate in tabelele 4 – 11.

Tabelul 4

Centralizatorul rezultatelor obtinute din simularea numerica

Model 1 **- trafic actual - AM**

Nr.intersectiei	Arterele	Organizarea circulatiei	Parametrii caracteristici modelului de trafic			Rezultate obtinute in urma simularii numerice			
			Indicele de utilizare	Rezerva de capacitate de circulatie	Nivelul de servici cf. ICU manual	Intarzieri medii pe vehicul	Intarzieri medii datorate oprirlor	Numar opriri pe vehicul	Viteza medie
			%	%		sec/veh	sec/veh	%	km/h
1	Artera 2 & Str. Institutului	semnalizare		100.0%					
2	Centura ocolitoare & Artera 2	semnalizare		100.0%					
3	Strada 1 & Str. Instutului/Str. Institutului	giratie		100.0%					
4	Str. Institutului/Str. Institutului & Strada 6	semnalizare		100.0%					
5	Strada 2 & Str. Institutuluiu	semnalizare		100.0%					
6	Str. Institutului & Strada 5	semnalizare		100.0%					
7	Strada 3/Strada 4 & Str. Institutului	giratie		100.0%					
8	Str. Institutului & Str. Fanarului & Str acces cartier	giratie	23.6%	76.4%	A	2	0.30	14%	32
9	DN73 & Str. Fanarului/Str. Institutului	giratie	54.3%	45.7%	A	2.9	0.30	8%	27
10	DN73 & Artera nod rutier	semnalizare	41.6%	58.4%	A	2.3	0.60	14%	32
11	Artera nod rutier & Legatura giratie	giratie	29.4%	70.6%	A	4	0.40	5%	27
12	Legatura giratie & DN1 - Cal Fagarasului & Legatura nod rutier	semnalizare	57.4%	42.6%	B	3.4	0.80	13%	27
13	Acces centru comercial & Artera nod rutier & DN1 - Cal Fagarasului	giratie	44.8%	55.2%	A	4	1.00	24%	24
14	Legatura & Str. Fanarului	semnalizare	21.7%	78.3%	A	0.3	0.00	0%	27

Tabelul 5

Centralizatorul rezultatelor obtinute din simularea numerica

Model 2 - trafic actual - PM

Nr.intersectiei	Arterele	Organizarea circulatiei	Parametrii caracteristici modelului de trafic			Rezultate obtinute in urma simularii numerice			
			Indicele de utilizare	Rezerva de capacitate de circulatie	Nivelul de servici cf. ICU manual	Intarzieri medii pe vehicul	Intarzieri datorate opririlor	Numar opriri pe vehicul	Viteza medie posibila
			%	%		sec/veh	sec/veh		km/h
1	Artera 2 & Str. Institutului	semnalizare		100.0%					
2	Centura ocolitoare & Artera 2	semnalizare		100.0%					
3	Strada 1 & Str. Instutului/Str. Institutului	giratie		100.0%					
4	Str. Institutului/Str. Institutului & Strada 6	semnalizare		100.0%					
5	Strada 2 & Str. Instituțuluiu	semnalizare		100.0%					
6	Str. Institutului & Strada 5	semnalizare		100.0%					
7	Strada 3/Strada 4 & Str. Institutului	giratie		100.0%					
8	Str. Institutului & Str. Fanarului & Str acces cartier	giratie	22.6%	77.4%	A	1.3	0.40	19%	46
9	DN73 & Str. Fanarului/Str. Institutului	giratie	55.9%	44.1%	B	3	0.20	4%	28
10	DN73 & Artera nod rutier	semnalizare	43.4%	56.6%	A	2.1	0.80	14%	32
11	Artera nod rutier & Legatura giratie	giratie	22.6%	77.4%	A	2.5	0.20	4%	28
12	Legatura giratie & DN1 - Cal Fagarasului & Legatura nod rutier	semnalizare	56.8%	43.2%	B	4.7	1.10	17%	25
13	Acces centru comercial & Artera nod rutier & DN1 - Cal Fagarasului	giratie	55.8%	44.2%	B	5.3	2.20	3700%	21
14	Legatura & Str. Fanarului	semnalizare	2430.0%	-2330.0%	A	0.3	0.00	0%	28

Tabelul 6

Centralizatorul rezultatelor obtinute din simularea numerica

Model 3 - trafic cu extindere carosabil - AM

Nr.intersectiei	Arterele	Organizarea circulatiei	Parametrii caracteristici modelului de trafic			Rezultate obtinute in urma simularii numerice			
			Indicele de utilizare	Rezerva de capacitate de circulatie	Nivelul de servici cf. ICU manual	Intarzieri medii pe vehicul	Intarzieri medii datorate oprirlor	Numar opriri pe vehicul	Viteza medie
			%	%		sec/veh	sec/veh	%	km/h
1	Artera 2 & Str. Institutului	semnalizare	15.1%	84.9%	A	2.7	0.00	0%	32
2	Centura ocolitoare & Artera 2	semnalizare	51.2%	48.8%	A	0.8	0.00	0%	41
3	Strada 1 & Str. Instutului/Str. Institutului	giratie	47.3%	52.7%	A	4.1	0.70	19%	36
4	Str. Institutului/Str. Institutului & Strada 6	semnalizare	15.3%	84.7%	A	0.3	0.10	0%	36
5	Strada 2 & Str. Institutului	semnalizare	27.5%	72.5%	A	1.5	1.00	19%	35
6	Str. Institutului & Strada 5	semnalizare	16.7%	83.3%	A	0.2	0.00	0%	39
7	Strada 3/Strada 4 & Str. Institutului	giratie	30.3%	69.7%	A	3.5	0.10	3%	37
8	Str. Institutului & Str. Fanarului & Str acces cartier	giratie	63.2%	36.8%	B	7.7	4.40	53%	33
9	DN73 & Str. Fanarului/Str. Institutului	giratie	56.9%	43.1%	B	5.6	1.00	23%	35
10	DN73 & Artera nod rutier	semnalizare	46.8%	53.2%	A	2.7	0.70	20%	31
11	Artera nod rutier & Legatura giratie	giratie	30.7%	69.3%	A	4.9	0.60	9%	30
12	Legatura giratie & DN1 - Cal Fagarasului & Legatura nod rutier	semnalizare	58.7%	41.3%	B	2.6	1.20	11%	31
13	Acces centru comercial & Artera nod rutier & DN1 - Cal Fagarasului	giratie	44.8%	55.2%	A	4	0.90	21%	26
14	Legatura & Str. Fanarului	semnalizare	21.7%	78.3%	A	0.4	0.00	0%	31

Tabelul 7

Centralizatorul rezultatelor obtinute din simularea numerica

Model 4 **- trafic cu extindere carosabil - PM**

Nr.intersectiei	Arterele	Organizarea circulatiei	Parametrii caracteristici modelului de trafic			Rezultate obtinute in urma simularii numerice			
			Indicele de utilizare	Rezerva de capacitate de circulatie	Nivelul de servici cf. ICU manual	Intarzieri medii pe vehicul	Intarzieri datorate opririlor	Numar opriri pe vehicul	Viteza medie posibila
			%	%		sec/veh	sec/veh		km/h
1	Artera 2 & Str. Institutului	semnalizare	36.9%	63.1%	A	3	0.00	2%	30
2	Centura ocolitoare & Artera 2	semnalizare	33.5%	66.5%	A	0.9	0.00	0%	40
3	Strada 1 & Str. Instutului/Str. Institutului	giratie	69.4%	30.6%	C	5	1.50	27%	33
4	Str. Institutului/Str. Institutului & Strada 6	semnalizare	15.2%	84.8%	A	0.3	0.10	0%	39
5	Strada 2 & Str. Institutului	semnalizare	35.3%	64.7%	A	0.5	0.10	50%	42
6	Str. Institutului & Strada 5	semnalizare	15.8%	84.2%	A	0.2	0.00	0%	38
7	Strada 3/Strada 4 & Str. Institutului	giratie	38.8%	61.2%	A	4	0.10	1%	38
8	Str. Institutului & Str. Fanarului & Str acces cartier	giratie	70.4%	29.6%	C	4.7	1.20	26%	36
9	DN73 & Str. Fanarului/Str. Institutului	giratie	58.0%	42.0%	B	3.9	0.50	8%	35
10	DN73 & Artera nod rutier	semnalizare	47.7%	52.3%	A	3.6	2.20	23%	30
11	Artera nod rutier & Legatura giratie	giratie	23.8%	76.2%	A	4.1	0.60	9%	32
12	Legatura giratie & DN1 - Cal Fagarasului & Legatura nod rutier	semnalizare	58.0%	42.0%	B	5.3	1.50	15%	27
13	Acces centru comercial & Artera nod rutier & DN1 - Cal Fagarasului	giratie	55.8%	44.2%	B	5.1	2.00	33%	23
14	Legatura & Str. Fanarului	semnalizare	24.3%	75.7%	A	0.3	0.00	0%	30

Tabelul 8

Centralizatorul rezultatelor obtinute din simularea numerica

Model 5 - trafic perspectiva cu extindere carosabil - AM

Nr.intersectiei	Arterele	Organizarea circulatiei	Parametrii caracteristici modelului de trafic			Rezultate obtinute in urma simularii numerice			
			Indicele de utilizare	Rezerva de capacitate de circulatie	Nivelul de servici cf. ICU manual	Intarzieri medii pe vehicul	Intarzieri medii datorate opririlor	Numar opriri pe vehicul	Viteza medie
			%	%		sec/veh	sec/veh	%	km/h
1	Artera 2 & Str. Institutului	semnalizare	18.1%	81.9%	A	2.7	0.00	0%	32
2	Centura ocolitoare & Artera 2	semnalizare	68.1%	31.9%	C	0.8	0.00	0%	41
3	Strada 1 & Str. Instutului/Str. Institutului	giratie	63.2%	36.8%	B	5	1.20	23%	34
4	Str. Institutului/Str. Institutului & Strada 6	semnalizare	18.6%	81.4%	A	0.3	0.10	0%	38
5	Strada 2 & Str. Institutului	semnalizare	32.8%	67.2%	A	0.7	0.50	12%	40
6	Str. Institutului & Strada 5	semnalizare	20.2%	79.8%	A	0.2	0.10	0%	39
7	Strada 3/Strada 4 & Str. Institutului	giratie	36.1%	63.9%	A	3.7	0.30	8%	36
8	Str. Institutului & Str. Fanarului & Str acces cartier	giratie	72.9%	27.1%	C	17.2	14.40	56%	25
9	DN73 & Str. Fanarului/Str. Institutului	giratie	66.7%	33.3%	C	5.9	1.50	20%	33
10	DN73 & Artera nod rutier	semnalizare	54.2%	45.8%	A	3.4	1.10	21%	30
11	Artera nod rutier & Legatura giratie	giratie	36.2%	63.8%	A	5.4	1.30	14%	29
12	Legatura giratie & DN1 - Cal Fagarasului & Legatura nod rutier	semnalizare	69.1%	30.9%	C	4.3	1.70	11%	28
13	Acces centru comercial & Artera nod rutier & DN1 - Cal Fagarasului	giratie	51.8%	48.2%	A	5.2	2.00	32%	23
14	Legatura & Str. Fanarului	semnalizare	23.5%	76.5%	A	0.5	0.00	1%	30

Tabelul 9

Centralizatorul rezultatelor obtinute din simularea numerica

Model 6 **- trafic perspectiva cu extindere carosabil - PM**

Nr.intersectiei	Arterele	Organizarea circulatiei	Parametrii caracteristici modelului de trafic			Rezultate obtinute in urma simularii numerice			
			Indicele de utilizare	Rezerva de capacitate de circulatie	Nivelul de servici cf. ICU manual	Intarzieri medii pe vehicul	Intarzieri datorate opririlor	Numar opriri pe vehicul	Viteza medie posibila
			%	%		sec/veh	sec/veh		km/h
1	Artera 2 & Str. Institutului	semnalizare	36.9%	63.1%	A	30	0.00	2%	30
2	Centura ocolitoare & Artera 2	semnalizare	33.5%	66.5%	A	0.9	0.00	0%	40
3	Strada 1 & Str. Instutului/Str. Institutului	giratie	69.4%	30.6%	C	5	1.50	27%	33
4	Str. Institutului/Str. Institutului & Strada 6	semnalizare	15.2%	84.8%	A	0.3	0.10	0%	39
5	Strada 2 & Str. Institutului	semnalizare	35.3%	64.7%	A	0.5	0.10	5%	42
6	Str. Institutului & Strada 5	semnalizare	15.6%	84.4%	A	0.2	0.00	0%	38
7	Strada 3/Strada 4 & Str. Institutului	giratie	35.8%	64.2%	A	4	0.10	1%	38
8	Str. Institutului & Str. Fanarului & Str acces cartier	giratie	70.4%	29.6%	C	4.7	1.2	26	36
9	DN73 & Str. Fanarului/Str. Institutului	giratie	58.0%	42.0%	B	3.9	0.50	8%	35
10	DN73 & Artera nod rutier	semnalizare	47.7%	3.0%	A	3.6	2.20	23%	30
11	Artera nod rutier & Legatura giratie	giratie	23.8%	76.2%	A	4.1	0.60	9%	32
12	Legatura giratie & DN1 - Cal Fagarasului & Legatura nod rutier	semnalizare	58.0%	42.0%	B	5.3	1.50	15%	27
13	Acces centru comercial & Artera nod rutier & DN1 - Cal Fagarasului	giratie	55.8%	44.2%	B	5.1	2.00	33%	23
14	Legatura & Str. Fanarului	semnalizare	24.3%	75.7%	A	0.3	0.00	0%	30

Tabelul 10

Centralizatorul rezultatelor obtinute din simularea numerica

Model 7 - trafic maxim cu extindere carosabil - AM

Nr.intersectiei	Arterele	Organizarea circulatiei	Parametrii caracteristici modelului de trafic			Rezultate obtinute in urma simularii numerice			
			Indicele de utilizare	Rezerva de capacitate de circulatie	Nivelul de servici cf. ICU manual	Intarzieri medii pe vehicul	Intarzieri medii datorate opririlor	Numar opriri pe vehicul	Viteza medie
			%	%		sec/veh	sec/veh	%	km/h
1	Artera 2 & Str. Institutului	semnalizare	20.9%	79.1%	A	3	0.10	2%	32
2	Centura ocolitoare & Artera 2	semnalizare	88.9%	11.1%	E	1	0.00	0%	40
3	Strada 1 & Str. Instutului/Str. Institutului	giratie	76.5%	23.5%	D	6.9	3.00	36%	30
4	Str. Institutului/Str. Institutului & Strada 6	semnalizare	22.4%	77.6%	A	0.3	0.10	1%	38
5	Strada 2 & Str. Institutului	semnalizare	39.3%	60.7%	A	1.9	1.50	13%	32
6	Str. Institutului & Strada 5	semnalizare	24.4%	75.6%	A	0.3	0.10	0%	38
7	Strada 3/Strada 4 & Str. Institutului	giratie	43.5%	56.5%	A	4.5	0.60	8%	35
8	Str. Institutului & Str. Fanarului & Str acces cartier	giratie	86.9%	13.1%	E	46.4	44.70	67%	14
9	DN73 & Str. Fanarului/Str. Institutului	giratie	81.7%	18.3%	D	16.1	10.70	66%	26
10	DN73 & Artera nod rutier	semnalizare	65.3%	34.7%	C	12	8.80	45%	19
11	Artera nod rutier & Legatura giratie	giratie	44.4%	55.6%	A	72.4	72.90	70%	7
12	Legatura giratie & DN1 - Cal Fagarasului & Legatura nod rutier	semnalizare	84.7%	15.3%	E	9	5.90	12%	23
13	Acces centru comercial & Artera nod rutier & DN1 - Cal Fagarasului	giratie	62.2%	37.8%	B	5.6	2.20	29%	23
14	Legatura & Str. Fanarului	semnalizare	30.8%	69.2%	A	1	0.20	5%	27

Tabelul 11

Centralizatorul rezultatelor obtinute din simularea numerica

Model 8 - trafic maxim cu extindere carosabil - PM

Nr.intersectiei	Arterele	Organizarea circulatiei	Parametrii caracteristici modelului de trafic			Rezultate obtinute in urma simularii numerice			
			Indicele de utilizare	Rezerva de capacitate de circulatie	Nivelul de servici cf. ICU manual	Intarzieri medii pe vehicul	Intarzieri datorate opririlor	Numar opriri pe vehicul	Viteza medie posibila
			%	%		sec/veh	sec/veh		km/h
1	Artera 2 & Str. Institutului	semnalizare	52.0%	48.0%	A	3.5	0.10	5%	29
2	Centura ocolitoare & Artera 2	semnalizare	58.9%	41.1%	B	1.1	0.00	0%	40
3	Strada 1 & Str. Instutului/Str. Institutului	giratie	99.0%	1.0%	F	20.2	17.30	59%	18
4	Str. Institutului/Str. Institutului & Strada 6	semnalizare	21.1%	78.9%	A	0.6	0.20	0%	38
5	Strada 2 & Str. Institutului	semnalizare	47.2%	52.8%	A	0.8	0.60	7%	39
6	Str. Institutului & Strada 5	semnalizare	22.1%	77.9%	A	0.2	0.00	0%	38
7	Strada 3/Strada 4 & Str. Institutului	giratie	48.7%	51.3%	A	4.4	0.30	5%	37
8	Str. Institutului & Str. Fanarului & Str acces cartier	giratie	99.0%	1.0%	F	13.4	11.60	34%	27
9	DN73 & Str. Fanarului/Str. Institutului	giratie	81.9%	18.1%	D	4.8	0.80	15%	34
10	DN73 & Artera nod rutier	semnalizare	66.6%	33.4%	C	9.9	8.23	28%	22
11	Artera nod rutier & Legatura giratie	giratie	34.1%	65.9%	A	24.6	21.20	5%	16
12	Legatura giratie & DN1 - Cal Fagarasului & Legatura nod rutier	semnalizare	83.7%	16.3%	E	13.1	7.70	28%	20
13	Acces centru comercial & Artera nod rutier & DN1 - Cal Fagarasului	giratie	78.7%	21.3%	D	8.1	4.60	42%	19
14	Legatura & Str. Fanarului	semnalizare	34.8%	65.2%	A	0.4	0.00	0%	31

4. CONCLUZII

- In cadrul studiului de trafic au fost analizate variantele de desfasurare a traficului rutier in acord cu solutiile propuse in documentatiile de urbanism primite. Solutia propusa de proiectant pentru traseul strazii Institutului, prevede extinderea latimii partii carosabile a strazii de la 2 benzi de circulatie existent, la 4 benzi de circulatie si realizarea unei intersectii la nivel intre Varianta ocolitoare a Municipiului Brasov si drumul de legatura cu strada Institutului. Lungimea traseului care se va proiecta are o lungime de aproximativ 1600m.

- Studiul de trafic analizeaza modul in care traficul generat/atras de investitiile imobiliare prevazute in P.U.Z.-urile elaborate pentru zona urbana cuprinsa intre str. Institutului, Centura ocolitoare si CF Brasov Sibiu, vor influenta desfasurarea traficului rutier pe strada Institutului, strada ce se propune a avea 4 benzi de circulatie in sectiune transversala.

- In vederea intocmirii studiului de trafic in cadrul prezentei lucrari, s-a realizat un program de investigatii asupra deplasarilor vehiculelor in intersectiile de pe retea. Programul investigatiilor asupra deplasarilor de vehicule in intersectii cuprinde un set de masuratori realizate sub forma sondajelor de trafic. Pentru realizarea masuratorilor de trafic au fost alese intersectiile reprezentative existente din zona analizata.

- Intersectiile in care au fost efectuate sondaje de trafic sunt:
  - Centura ocolitoare a municipiului Brasov – Acces Centru Comercial Hornbach (intersectia 13),
  - Str. Institutului - Str. Fanarului (intersectia 101),
  - Str. Fanarului - DN 73 (str. Curmaturii) (intersectia 9),
  - Str. Institutului - Str. Egretei (intersectia 8).

- In vederea intocmirii studiului de trafic beneficiarul a pus la dispozitie valorile de debite cuprinse in recensamantul de circulatie realizat in anul 2015. Datele oferite de recensamantul de circulatie, evidentiaza debitele de trafic de pe Centura Ocolitoare aferente sectorului de drum analizat, sub forma mediei zilnice anuale MZA. Remarcam faptul ca pe drumul national Centura Ocolitoare debitele estimate de Recensamantul de Circulatie au valori de 5968 veh/zi ceea ce reprezinta 6729 vehicule etalon turisme/zi. Pentru perioada de perspectiva se estimeaza o crestere a valorilor de debite de trafic la: 9549 vehicule/zi, ceea ce reprezinta 10617 vehicule etalon turisme/zi.

- Debitele orare de trafic pe drumul national au fost calculate pe baza prevederilor Normativului 584/2012 – "*Normativ pentru determinarea traficului de calcul pentru proiectarea drumurilor din punct de vedere al capacitatii portante si al capacitatii de circulatie*". Debitele orare calculate indica pentru traficul actual un numar de 497 v.e.t./ora, iar pentru perspectiva un numar de 784 v.e.t./ora.

- Pentru stabilirea debitelor de trafic generate/atrase de viitoarele investitii prevazute din zona, s-a utilizat metoda de calcul *"Trip Generation"*, stabilita de "*Institute of Transportation Engineering*" (I.T.E.) din Statele Unite ale Americii.

- Debitele de trafic (estimate) ce vor fi generate/atrase de viitoarele investitii prevazute in planurile de urbanism au fost introduse in modelele de calcul prin intermediul viitoarelor intersectii proiectate pe strada Institutului. Valorile de trafic generate/atrase au fost repartizate astfel: catre Centura Ocolitoare a Municipiului Brasov (50%) si catre str. Fanarului (50%).

- Simularea numerica cu ajutorul aplicatiilor Synchro10 si SimTraffic evidentiaza **parametri caracteristici** ai desfasurarii deplasarilor:

  Synchro:

  - *Indicele de Utilizare a Capacitatii (I.C.U.)* calculat in conformitate cu manualul cu acelasi nume publicat de compania Trafficware Ltd. – U.S.A. – realizatoarea aplicatiilor Synchro si SimTraffic.
  - *Nivelul de Servici* (L.O.S.) in intersectie calculat cf. manualul "*Intersection Capacity Utilization - Evaluation Procedures for Intersection and Interchanges*".

  SimTraffic:

  - *Intarzieri medii ale vehiculelor in intersectie.*
  - *Intarzieri medii ale vehiculelor ce sunt obligate sa opreasca in intersectie.*
  - *Numar mediu de opriri in intersectie.*
  - *Viteza medie de deplasare a vehiculelor.*

- Sinteza comparativa asupra parametrilor ce caracterizeaza desfasurarea traficului de vehicule in intersectii, este prezentata in tabelele nr. 4 - 11.

- Intersectia dintre Centura Ocolitoare si str. Institutului se va realiza prin intermediul unei desprinderi, respectiv inscrieri in flux, a vehiculelor ce doresc sa se deplaseze catre strada Institutului. In figura 12 este prezentata schema de principiu a fluxurilor de circulatie in aceasta intersectie.

Fig. 12 – Intersectia Centura ocolitoare Brasov – Str. Institutului
(schema de principiu a fluxurilor de circulatie)

- Din analiza parametrilor obtinuti din simularile numerice realizate pentru circulatia rutiera dupa extinderea strazii Insititului si remodelarea alcatuirii intersectiilor, precum si pentru traficul de perspectiva (modelele 3, 4, 5 si 6), constatam ca in intersectiile de pe traseul strazii Institutului, precum si in ansablul intersectiilor care alcatuiesc nodul rutier dintre DN1 si DN73, nu se inregistreaza valori ridicate a indicilor de utilizare a capacitatii (ICU) si nu se depaseste nivelul de serviciu "C", fapt care indica conditii corespunzatoare de deplasare.

- In situatia in care se vor inregistra cresteri suplimentare ale debitelor de trafic au fost estimate prin simulare numerica (modelele 7 si 8) limitele maxime ale capacitatii de circulatei a intersectiilor din zona analizata. In ipoteza in care circulatia se doreste a se desfasura in conditii corespunzatoare. In acest mod administratorul retelei rutiere are la

dispozitie o estimare asupra debitelor limita pe care le poate prelua reteaua rutiera modernizata. In anexele 7 si 8 pot fi identificati in detaliu toti parametrii ce caracterizeaza deplasarile in fiecare intersectie analizata (AM si PM).

- Pentru modelele de trafic ce stabilesc limite maxime ale conditiilor de circulatie constatam ca intersectiile:
  - Nr. 3 Strada 1 - Str. Institutului,
  - Nr. 8 Str. Institutului - Str. Fanarului – Str. acces cartier,
  - Nr. 12 Legatura giratie DN1 - Calea Fagarasului - Legatura nod rutier, pot determina intarzieri in desfasurarea deplasarilor si chiar siruri de asteptare.

- In intersesctia dintre Centura Ocolitoare si str. Institutului nu se estimeaza intarzieri sau siruri de asteptare pe drumul national. In cazul in care se inregistreza cresteri ale debitelor de trafic pot sa apara unele deficientele in desfasurarea deplasarilor acestea sunt estimate doar pe arterele laterale (drumul de legatura intre Centura ocolitoare si str. Institutului).

5. RECOMANDARI

In urma analizei modelelor de trafic pentru circulatia rutiera putem formula urmatoarele recomandari:

- Remodelarea geometrica si functionala a strazii Institutultui este posibila prin introducerea a doua benzi suplimentare pe sectorul cuprins intre CF Brasov - Sibiu - Ocolitoarea Brasov.

- Legatura rutiera intre Centura ocolitoare si strada Institutului se poate realiza prin intermediul unui tronson de drum de legatura conform schitei prezentata in fig. 12.

- Accesul rutier din Centura ocolitoare catre str. Institutului se va realiza prin relatii de trafic de dreapta si prin intermediul unor benzi suplimentare de accelerare, respectiv de decelerare.

- Pentru a fi puse in aplicare rezultatele studiului de trafic, este necesar intocmirea unor documentatii tehnice de specialitate.

dr. ing. ***Valentin ANTON***

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PLANSE


Centura Brasov
E574
Centura Brașov
E68
Sika România
Marsorom
Helvetic Impex
Arabesque
Hornba
Losan Romania
Raiffeisen Bank
Institutul de Cercetare - Dezvoltare al...
Str. Institutului
str. cartier
Str. Fanarului
DN1
DN1 - Cal Fagarasului
DN73
Google
Auchar
23.6%
34.0%
44.8%
39.1%
21.7%
57.4%
29.4%
41.6%
54.3%
37.6%


Centura Brasov
Institutul de Cercetare - Dezvoltare al...
E574
Centura Brașov
str. cartier
Strada Salciei
E68
Sika România
Marsorom
Helvetic Impex
Arabesque
Hornba
Losan Romania
Raiffeisen Bank
DN1
Str. Fanarului
DN1 - Cal Fagarasului
DN73
Auchan
Google
22.6%
38.9%
55.8%
41.6%
24.3%
56.8%
22.6%
55.9%
49.1%
43.4%

Urbi Plan s.r.l.
Str. Traian, nr.222, sector 2, Bucuresti

Indici de Utilizare a Capacitatii
Plansa 3


36.9%
26.0%
33.5%
69.4%
15.2%
35.3%
15.8%
35.8%
70.4%
40.3%
55.8%
41.6%
24.3%
58.0%
23.8%
58.0%
47.7%
P.U.Z - ANSAMBLU IMOBILE COLECTIVE, SERVICII SI COMERT aprobat cu HCL nr. 982/2008
P.U.Z - PAVEL
Institutul de Cercetare - Dezvoltare pt...
Sika Romania
Marsorom
Helvetic Impex
Arabesque
Hornbach
Raiffeisen Bank
Auchan
Google


18.1%
10.2%
68.1%
63.2%
18.6%
32.8%
20.2%
36.1%
72.9%
38.8%
51.8%
45.6%
25.3%
69.1%
36.2%
66.7%
54.2%
Institutul de Cercetare - Dezvoltare al...
P.U.Z - PAVEL
P.U.Z - ANSAMBLU IMOBILE COLECTIVE, SERVICII SI COMERT aprobat cu HCL nr. 982/2008
Centura Brasov
Sos. Romania
Helvetic Impex
Mersorom
Arabesque
Hornbach
Losan Romania
Raiffeisen Bank
Google
Auchan
MOL

Urbi Plan s.r.l.
Str. Traian, nr.222, sector 2, Bucuresti

Indici de Utilizare a Capacitatii
Plansa 6


20.9%
11.9%
88.9%
76.5%
22.4%
39.3%
24.4%
43.5%
86.9%
45.9%
62.2%
55.3%
30.8%
84.7%
44.4%
81.7%
65.3%
Institutul de Cercetare - Dezvoltare af...
P.U.Z - ANSAMBLU IMOBILE COLECTIVE, SERVICII SI COMERT aprobat cu HCL nr. 982/2008
P.U.Z - PAVEL
Sora Romana
Mersorom
Helvetic Impex
Arabesque
Hornbach
Losan Romania
Raiffeisen Bank
Google
Auchan
MOL


52.0%
37.4%
58.9%
99.0%
21.1%
47.2%
22.1%
48.7%
99.0%
55.4%
78.7%
59.0%
34.8%
83.7%
34.1%
81.9%
66.6%
Institutul de Cercetare - Dezvoltare al...
P.U.Z - PAVEL
P.U.Z - ANSAMBLU IMOBILE COLECTIVE, SERVICII SI COMERT aprobat cu HCL nr. 982/2008
Sika Romania
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Losan Romania
Raiffeisen Bank
Auchan
Google

Urbi Plan s.r.l.
Str. Traian, nr.222, sector 2, Bucuresti

Numerotare intersectii

ANEXE

8: Str. Instutului & str. cartier Performance by approach

Approach	SB	SE	NW	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.1
Total Del/Veh (s)	5.8	0.5	0.3	3.8
Stop Del/Veh (s)	3.2	0.0	0.0	2.0
Stop/Veh	0.94	0.00	0.00	0.60
Avg Speed (kph)	35	51	44	39
HC Emissions (g)	1	0	0	1
CO Emissions (g)	27	2	28	57
NOx Emissions (g)	2	1	2	4

9: DN73 & Str. Fanarului Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	3.2	2.7	2.7	2.9
Stop Del/Veh (s)	0.2	0.5	0.3	0.3
Stop/Veh	0.08	0.11	0.00	0.08
Avg Speed (kph)	28	23	32	27
HC Emissions (g)	3	1	1	4
CO Emissions (g)	160	28	30	218
NOx Emissions (g)	15	4	3	22

10: DN73 & Acces nod rutier Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0	0.0
Total Del/Veh (s)	6.3	1.5	1.9	2.3
Stop Del/Veh (s)	4.6	0.5	0.1	0.6
Stop/Veh	0.72	0.16	0.05	0.14
Avg Speed (kph)	26	36	33	32
HC Emissions (g)	0	0	3	4
CO Emissions (g)	30	8	204	242
NOx Emissions (g)	2	1	17	20

11: Acces nod rutier & Acces intersectie Performance by approach

Approach	WB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.3	2.6	4.0
Stop Del/Veh (s)	0.5	0.0	0.4
Stop/Veh	0.06	0.00	0.05
Avg Speed (kph)	26	31	27
HC Emissions (g)	2	1	2
CO Emissions (g)	106	31	137
NOx Emissions (g)	11	3	13

12: DN1 - Cal Fagarasului & Acces Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	1.4	4.2	5.6	3.4
Stop Del/Veh (s)	0.2	0.1	4.9	0.8
Stop/Veh	0.03	0.09	0.54	0.13
Avg Speed (kph)	35	24	14	27
HC Emissions (g)	7	1	0	8
CO Emissions (g)	415	65	7	487
NOx Emissions (g)	30	6	1	37

13: Acces intersectie & DN1 & DN1 - Cal Fagarasului Performance by approach

Approach	EB	NE	SW	All
Denied Del/Veh (s)	0.0	2.5	0.0	0.1
Total Del/Veh (s)	4.2	6.3	3.7	4.0
Stop Del/Veh (s)	0.5	3.4	1.3	1.0
Stop/Veh	0.12	0.57	0.31	0.24
Avg Speed (kph)	27	21	21	24
HC Emissions (g)	1	0	2	3
CO Emissions (g)	47	4	86	138
NOx Emissions (g)	7	0	12	20

14: Acces & Str. Fanarului Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.6	0.2	0.3
Stop Del/Veh (s)	0.0	0.0	0.0
Stop/Veh	0.00	0.00	0.00
Avg Speed (kph)	39	16	27
HC Emissions (g)	1	0	1
CO Emissions (g)	75	10	84
NOx Emissions (g)	4	2	6

28: DN1 - Cal Fagarasului/Str. Fanarului Performance by approach

Approach	WB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	12.4	0.6	2.4
Stop Del/Veh (s)	8.8	0.0	1.3
Stop/Veh	0.89	0.01	0.14
Avg Speed (kph)	13	21	20
HC Emissions (g)	0	2	2
CO Emissions (g)	3	77	81
NOx Emissions (g)	0	11	11

29: Acces centru comercial & DN1 Performance by approach

Approach	EB	WB	NE	All
Denied Del/Veh (s)	0.2	0.0	0.1	0.1
Total Del/Veh (s)	0.4	0.6	1.6	0.5
Stop Del/Veh (s)	0.0	0.2	2.3	0.1
Stop/Veh	0.00	0.01	1.00	0.01
Avg Speed (kph)	47	32	29	38
HC Emissions (g)	2	6	0	8
CO Emissions (g)	90	398	1	489
NOx Emissions (g)	5	24	0	30

101: Str. Fanarului & Str. Instutului Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.2	0.0	0.0	0.1
Total Del/Veh (s)	6.7	0.5	1.5	3.0
Stop Del/Veh (s)	3.6	0.1	0.4	1.4
Stop/Veh	1.00	0.03	0.03	0.38
Avg Speed (kph)	27	28	39	32
HC Emissions (g)	1	0	2	3
CO Emissions (g)	38	26	93	157
NOx Emissions (g)	3	2	6	11

Total Network Performance

Denied Del/Veh (s)	0.4
Total Del/Veh (s)	12.5
Stop Del/Veh (s)	2.7
Stop/Veh	0.51
Avg Speed (kph)	35
HC Emissions (g)	59
CO Emissions (g)	3091
NOx Emissions (g)	264

Intersection: 8: Str. Instutului & str. cartier

Movement	SB
Directions Served	LR
Maximum Queue (m)	15.3
Average Queue (m)	8.8
95th Queue (m)	14.1
Link Distance (m)	260.8
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 9: DN73 & Str. Fanarului

Movement	EB	EB	WB	WB
Directions Served	T	R	L	T
Maximum Queue (m)	8.9	10.6	9.2	9.1
Average Queue (m)	3.5	3.4	7.3	1.8
95th Queue (m)	10.7	10.7	13.4	7.8
Link Distance (m)	125.4	125.4	33.6	33.6
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 10: DN73 & Acces nod rutier

Movement	EB	NB
Directions Served	L	L
Maximum Queue (m)	15.1	9.3
Average Queue (m)	10.0	6.8
95th Queue (m)	14.2	12.5
Link Distance (m)	112.5	91.0
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 11: Acces nod rutier & Acces intersectie

Movement	
Directions Served	
Maximum Queue (m)	
Average Queue (m)	
95th Queue (m)	
Link Distance (m)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 12: DN1 - Cal Fagarasului & Acces

Movement	WB	WB	NB
Directions Served	R	R	R
Maximum Queue (m)	11.0	19.5	24.7
Average Queue (m)	2.2	3.9	20.9
95th Queue (m)	9.4	16.8	26.6
Link Distance (m)	75.1	75.1	10.1
Upstream Blk Time (%)			23
Queuing Penalty (veh)			98
Storage Bay Dist (m)			
Storage Blk Time (%)		0	
Queuing Penalty (veh)		1	

Intersection: 13: Acces intersectie & DN1 & DN1 - Cal Fagarasului

Movement	EB	EB	NE	NE	SW	SW
Directions Served	T	T	L	R>	<L	R
Maximum Queue (m)	16.3	8.3	9.2	15.9	15.4	21.5
Average Queue (m)	9.8	1.7	5.5	5.0	10.3	12.5
95th Queue (m)	19.5	7.2	12.9	15.6	14.5	21.2
Link Distance (m)	44.6	44.6	75.5		48.2	48.2
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)				20.0		
Storage Blk Time (%)				0		
Queuing Penalty (veh)				0		

Intersection: 14: Acces & Str. Fanarului

Movement	
Directions Served	
Maximum Queue (m)	
Average Queue (m)	
95th Queue (m)	
Link Distance (m)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 28: DN1 - Cal Fagarasului/Str. Fanarului

Movement	WB	WB	NW
Directions Served	T	T	L
Maximum Queue (m)	9.3	15.9	5.7
Average Queue (m)	3.6	15.1	2.3
95th Queue (m)	10.9	16.0	6.8
Link Distance (m)	46.1	46.1	43.0
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 29: Acces centru comercial & DN1

Movement	NE
Directions Served	R
Maximum Queue (m)	3.2
Average Queue (m)	1.7
95th Queue (m)	4.1
Link Distance (m)	92.3
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 101: Str. Fanarului & Str. Instutului

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (m)	21.9	9.0
Average Queue (m)	16.8	1.8
95th Queue (m)	21.1	7.7
Link Distance (m)	139.5	185.0
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 99

Lane Group	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Volume (vph)	194	1	2	31	51	56
Future Volume (vph)	194	1	2	31	51	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.999				0.929	
Flt Protected	0.953			0.997		
Satd. Flow (prot)	1789	0	0	1873	1745	0
Flt Permitted	0.953			0.997		
Satd. Flow (perm)	1789	0	0	1873	1745	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	277.3			687.0	200.0	
Travel Time (s)	20.0			49.5	14.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	211	1	2	34	55	61
Shared Lane Traffic (%)						
Lane Group Flow (vph)	212	0	0	36	116	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.5			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25	15	25			15
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 23.6%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	94	430	301	157	3	176
Future Volume (vph)	94	430	301	157	3	176
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.877				0.867	
Flt Protected			0.950		0.999	
Satd. Flow (prot)	3131	0	1785	1879	1627	0
Flt Permitted			0.950		0.999	
Satd. Flow (perm)	3131	0	1785	1879	1627	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	162.7			68.9	145.3	
Travel Time (s)	11.7			5.0	10.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	102	467	327	171	3	191
Shared Lane Traffic (%)						
Lane Group Flow (vph)	569	0	327	171	194	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			3.5	3.5	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Yield			Yield	Yield	

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 54.3%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	100	20	90	79	400	331
Future Volume (vph)	100	20	90	79	400	331
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	0.0	0.0			25.0
Storage Lanes	1	1	1			1
Taper Length (m)	7.5		7.5			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1785	1597	1785	1879	1879	1597
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1785	1597	1785	1879	1879	1597
Link Speed (k/h)	50			50	50	
Link Distance (m)	147.2			97.6	145.3	
Travel Time (s)	10.6			7.0	10.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	22	98	86	435	360
Shared Lane Traffic (%)						
Lane Group Flow (vph)	109	22	98	86	435	360
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.5			3.5	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25	15	25			15
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 41.6%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	WBR	WBR2	SBL	SBR	SEL
Lane Configurations					
Traffic Volume (vph)	0	421	0	0	120
Future Volume (vph)	0	421	0	0	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97
Frt		0.865			
Flt Protected					0.950
Satd. Flow (prot)	0	1625	0	0	3463
Flt Permitted					0.950
Satd. Flow (perm)	0	1625	0	0	3463
Link Speed (k/h)	50		50		50
Link Distance (m)	147.2		51.4		156.4
Travel Time (s)	10.6		3.7		11.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	458	0	0	130
Shared Lane Traffic (%)					
Lane Group Flow (vph)	0	458	0	0	130
Enter Blocked Intersection	No	No	No	No	No
Lane Alignment	Right	Right	Left	Right	Left
Median Width(m)	0.0		0.0		7.0
Link Offset(m)	0.0		0.0		0.0
Crosswalk Width(m)	4.8		4.8		4.8
Two way Left Turn Lane					
Headway Factor	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	15	15	25	15	25
Sign Control	Yield		Yield		Yield

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 29.4%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	WBR	WBR2	NBR
Lane Configurations				
Traffic Volume (vph)	891	981	524	421
Future Volume (vph)	891	981	524	421
Ideal Flow (vphpl)	1900	1900	1900	1900
Storage Length (m)		20.0		0.0
Storage Lanes		1		1
Taper Length (m)				
Lane Util. Factor	0.95	0.88	1.00	1.00
Frt		0.850	0.850	0.865
Flt Protected				
Satd. Flow (prot)	3570	2811	1597	1625
Flt Permitted				
Satd. Flow (perm)	3570	2811	1597	1625
Link Speed (k/h)	50			
Link Distance (m)	137.2			
Travel Time (s)	9.9			
Peak Hour Factor	0.92	0.92	0.92	0.92
Adj. Flow (vph)	968	1066	570	458
Shared Lane Traffic (%)				
Lane Group Flow (vph)	968	1066	570	458
Enter Blocked Intersection	No	No	No	No
Lane Alignment	Left	Right	Right	Right
Median Width(m)	0.0			
Link Offset(m)	0.0			
Crosswalk Width(m)	4.8			
Two way Left Turn Lane				
Headway Factor	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	15	15
Sign Control	Free			

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 57.4%		ICU Level of Service B	
Analysis Period (min) 15			

Lane Group	EBT	EBR	EBR2	NEL	NER	NER2	SWL2	SWL	SWR
Lane Configurations									
Traffic Volume (vph)	723	100	26	25	32	10	136	10	995
Future Volume (vph)	723	100	26	25	32	10	136	10	995
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)		0.0		0.0	20.0			0.0	0.0
Storage Lanes		1		1	1			1	2
Taper Length (m)				7.5				7.5	
Lane Util. Factor	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.88
Frt		0.850			0.850				0.850
Flt Protected				0.950				0.950	
Satd. Flow (prot)	3570	1597	0	1785	1597	0	0	1785	2811
Flt Permitted				0.950				0.950	
Satd. Flow (perm)	3570	1597	0	1785	1597	0	0	1785	2811
Link Speed (k/h)	50								
Link Distance (m)	78.2								
Travel Time (s)	5.6								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	786	109	28	27	35	11	148	11	1082
Shared Lane Traffic (%)									
Lane Group Flow (vph)	786	137	0	27	46	0	0	159	1082
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Right	Left	Right	Right	Left	Left	Right
Median Width(m)	0.0								
Link Offset(m)	0.0								
Crosswalk Width(m)	4.8								
Two way Left Turn Lane									
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	15	25	15	15	25	25	15
Sign Control	Yield								

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 44.8%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	160	0	524
Future Volume (vph)	0	0	0	160	0	524
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.88
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	0	0	1879	0	2811
Flt Permitted						
Satd. Flow (perm)	0	0	0	1879	0	2811
Link Speed (k/h)	50			50	50	
Link Distance (m)	62.9			162.7	37.0	
Travel Time (s)	4.5			11.7	2.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	174	0	570
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	174	0	570
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	0.0	
Link Offset(m)	0.0			3.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 21.7%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	0	160	981	0
Future Volume (vph)	0	0	0	160	981	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3570	3463	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3570	3463	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	82.9			62.9	58.5	
Travel Time (s)	6.0			4.5	4.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	174	1066	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	174	1066	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	0.0	
Link Offset(m)	0.0			4.0	7.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Stop			Yield	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 39.1%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	844	20	0	1020	0	5
Future Volume (vph)	844	20	0	1020	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Frt	0.996					0.865
Flt Protected						
Satd. Flow (prot)	3556	0	0	3570	0	1625
Flt Permitted						
Satd. Flow (perm)	3556	0	0	3570	0	1625
Link Speed (k/h)	50			50	50	
Link Distance (m)	141.0			78.2	120.2	
Travel Time (s)	10.2			5.6	8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	917	22	0	1109	0	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	939	0	0	1109	0	5
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 34.0%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	240	8	99	171	7	218
Future Volume (vph)	240	8	99	171	7	218
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.995		0.915			
Flt Protected	0.954					0.998
Satd. Flow (prot)	1783	0	1719	0	0	1875
Flt Permitted	0.954					0.998
Satd. Flow (perm)	1783	0	1719	0	0	1875
Link Speed (k/h)	50		50			50
Link Distance (m)	147.8		68.9			200.0
Travel Time (s)	10.6		5.0			14.4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	261	9	108	186	8	237
Shared Lane Traffic (%)						
Lane Group Flow (vph)	270	0	294	0	0	245
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.5		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25	15		15	25	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.6%		ICU Level of Service A	
Analysis Period (min) 15			

8: Str. Instututului & str. cartier Performance by approach

Approach	SB	SE	NW	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	4.3	0.6	0.6	1.3
Stop Del/Veh (s)	2.1	0.0	0.0	0.4
Stop/Veh	1.00	0.00	0.00	0.19
Avg Speed (kph)	39	49	43	46
HC Emissions (g)	0	1	1	2
CO Emissions (g)	5	13	54	73
NOx Emissions (g)	1	3	3	7

9: DN73 & Str. Fanarului Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	3.3	2.6	3.0	3.0
Stop Del/Veh (s)	0.1	0.3	0.3	0.2
Stop/Veh	0.08	0.02	0.00	0.04
Avg Speed (kph)	28	23	32	28
HC Emissions (g)	3	1	1	5
CO Emissions (g)	193	29	40	263
NOx Emissions (g)	18	5	4	26

10: DN73 Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0	0.0
Total Del/Veh (s)	5.8	1.5	1.3	2.1
Stop Del/Veh (s)	3.9	0.6	0.0	0.8
Stop/Veh	0.61	0.14	0.01	0.14
Avg Speed (kph)	26	37	34	32
HC Emissions (g)	1	0	3	4
CO Emissions (g)	49	9	182	239
NOx Emissions (g)	3	1	12	16

11: Performance by approach

Approach	WB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.8	3.1	3.5
Stop Del/Veh (s)	0.1	0.2	0.2
Stop/Veh	0.04	0.03	0.04
Avg Speed (kph)	27	30	28
HC Emissions (g)	1	1	2
CO Emissions (g)	80	60	140
NOx Emissions (g)	8	5	13

12: DN1 - Cal Fagarasului Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	2.1	5.8	9.0	4.7
Stop Del/Veh (s)	0.5	0.2	8.6	1.1
Stop/Veh	0.04	0.15	0.76	0.17
Avg Speed (kph)	33	21	11	25
HC Emissions (g)	8	1	0	9
CO Emissions (g)	486	76	6	568
NOx Emissions (g)	38	8	1	47

13: DN1 & DN1 - Cal Fagarasului Performance by approach

Approach	EB	NE	SW	All
Denied Del/Veh (s)	0.0	2.5	0.0	0.2
Total Del/Veh (s)	5.8	6.3	4.8	5.3
Stop Del/Veh (s)	1.8	3.2	2.3	2.2
Stop/Veh	0.33	0.59	0.37	0.37
Avg Speed (kph)	23	21	19	21
HC Emissions (g)	1	0	2	3
CO Emissions (g)	44	20	93	157
NOx Emissions (g)	6	2	14	22

14: Str. Fanarului Performance by approach

Approach	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.4	0.2	0.3
Stop Del/Veh (s)	0.0	0.0	0.0
Stop/Veh	0.00	0.00	0.00
Avg Speed (kph)	38	17	28
HC Emissions (g)	1	0	2
CO Emissions (g)	85	11	96
NOx Emissions (g)	5	2	7

28: DN1 - Cal Fagarasului/Str. Fanarului Performance by approach

Approach	WB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	14.3	0.6	3.2
Stop Del/Veh (s)	11.4	0.0	2.1
Stop/Veh	0.59	0.01	0.12
Avg Speed (kph)	11	21	18
HC Emissions (g)	0	2	2
CO Emissions (g)	8	87	94
NOx Emissions (g)	1	13	14

29: DN1 Performance by approach

Approach	EB	WB	NE	All
Denied Del/Veh (s)	0.2	0.0	0.1	0.1
Total Del/Veh (s)	0.7	0.8	1.2	0.8
Stop Del/Veh (s)	0.0	0.3	1.8	0.2
Stop/Veh	0.00	0.01	1.00	0.01
Avg Speed (kph)	45	31	30	36
HC Emissions (g)	2	7	0	9
CO Emissions (g)	99	441	1	541
NOx Emissions (g)	6	30	0	37

101: Str. Fanarului & Str. Instututului Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.2	0.0	0.0	0.1
Total Del/Veh (s)	11.8	1.0	1.4	4.7
Stop Del/Veh (s)	8.5	0.1	0.2	3.0
Stop/Veh	0.98	0.06	0.04	0.36
Avg Speed (kph)	21	27	43	28
HC Emissions (g)	1	1	1	2
CO Emissions (g)	35	38	37	110
NOx Emissions (g)	2	3	3	8

Total Network Performance

Denied Del/Veh (s)	0.6
Total Del/Veh (s)	15.9
Stop Del/Veh (s)	4.0
Stop/Veh	0.56
Avg Speed (kph)	33
HC Emissions (g)	66
CO Emissions (g)	3479
NOx Emissions (g)	302

Lane Group	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Volume (vph)	92	2	2	66	50	132
Future Volume (vph)	92	2	2	66	50	132
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.997				0.902	
Flt Protected	0.953			0.999		
Satd. Flow (prot)	1785	0	0	1877	1695	0
Flt Permitted	0.953			0.999		
Satd. Flow (perm)	1785	0	0	1877	1695	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	277.3			687.0	200.0	
Travel Time (s)	20.0			49.5	14.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	100	2	2	72	54	143
Shared Lane Traffic (%)						
Lane Group Flow (vph)	102	0	0	74	197	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.5			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25	15	25			15
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 22.6%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	217	383	197	191	8	262
Future Volume (vph)	217	383	197	191	8	262
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.904				0.869	
Flt Protected			0.950		0.998	
Satd. Flow (prot)	3227	0	1785	1879	1629	0
Flt Permitted			0.950		0.998	
Satd. Flow (perm)	3227	0	1785	1879	1629	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	162.7			68.9	145.3	
Travel Time (s)	11.7			5.0	10.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	236	416	214	208	9	285
Shared Lane Traffic (%)						
Lane Group Flow (vph)	652	0	214	208	294	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			3.5	3.5	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Yield			Yield	Yield	

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 55.9%		ICU Level of Service B	
Analysis Period (min) 15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	150	95	101	120	370	210
Future Volume (vph)	150	95	101	120	370	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	0.0	0.0			25.0
Storage Lanes	1	1	1			1
Taper Length (m)	7.5		7.5			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1785	1597	1785	1879	1879	1597
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1785	1597	1785	1879	1879	1597
Link Speed (k/h)	50			50	50	
Link Distance (m)	147.2			97.6	145.3	
Travel Time (s)	10.6			7.0	10.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	163	103	110	130	402	228
Shared Lane Traffic (%)						
Lane Group Flow (vph)	163	103	110	130	402	228
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.5			3.5	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25	15	25			15
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 43.4%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	WBR	WBR2	SBL	SBR	SEL
Lane Configurations					
Traffic Volume (vph)	0	311	0	0	245
Future Volume (vph)	0	311	0	0	245
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97
Frt		0.865			
Flt Protected					0.950
Satd. Flow (prot)	0	1625	0	0	3463
Flt Permitted					0.950
Satd. Flow (perm)	0	1625	0	0	3463
Link Speed (k/h)	50		50		50
Link Distance (m)	147.2		51.4		156.4
Travel Time (s)	10.6		3.7		11.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	338	0	0	266
Shared Lane Traffic (%)					
Lane Group Flow (vph)	0	338	0	0	266
Enter Blocked Intersection	No	No	No	No	No
Lane Alignment	Right	Right	Left	Right	Left
Median Width(m)	0.0		0.0		7.0
Link Offset(m)	0.0		0.0		0.0
Crosswalk Width(m)	4.8		4.8		4.8
Two way Left Turn Lane					
Headway Factor	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	15	15	25	15	25
Sign Control	Yield		Yield		Yield

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 22.6%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	WBR	WBR2	NBR
Lane Configurations				
Traffic Volume (vph)	1117	1030	600	311
Future Volume (vph)	1117	1030	600	311
Ideal Flow (vphpl)	1900	1900	1900	1900
Storage Length (m)		20.0		0.0
Storage Lanes		1		1
Taper Length (m)				
Lane Util. Factor	0.95	0.88	1.00	1.00
Frt		0.850	0.850	0.865
Flt Protected				
Satd. Flow (prot)	3570	2811	1597	1625
Flt Permitted				
Satd. Flow (perm)	3570	2811	1597	1625
Link Speed (k/h)	50			
Link Distance (m)	137.2			
Travel Time (s)	9.9			
Peak Hour Factor	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1214	1120	652	338
Shared Lane Traffic (%)				
Lane Group Flow (vph)	1214	1120	652	338
Enter Blocked Intersection	No	No	No	No
Lane Alignment	Left	Right	Right	Right
Median Width(m)	0.0			
Link Offset(m)	0.0			
Crosswalk Width(m)	4.8			
Two way Left Turn Lane				
Headway Factor	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	15	15
Sign Control	Free			

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 56.8%		ICU Level of Service B	
Analysis Period (min) 15			

Lane Group	EBT	EBR	EBR2	NEL	NER	NER2	SWL2	SWL	SWR
Lane Configurations									
Traffic Volume (vph)	808	150	70	75	121	45	188	50	991
Future Volume (vph)	808	150	70	75	121	45	188	50	991
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)		0.0		0.0	20.0			0.0	0.0
Storage Lanes		1		1	1			1	2
Taper Length (m)				7.5				7.5	
Lane Util. Factor	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.88
Frt		0.850			0.850				0.850
Flt Protected				0.950				0.950	
Satd. Flow (prot)	3570	1597	0	1785	1597	0	0	1785	2811
Flt Permitted				0.950				0.950	
Satd. Flow (perm)	3570	1597	0	1785	1597	0	0	1785	2811
Link Speed (k/h)	50								
Link Distance (m)	78.2								
Travel Time (s)	5.6								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	878	163	76	82	132	49	204	54	1077
Shared Lane Traffic (%)									
Lane Group Flow (vph)	878	239	0	82	181	0	0	258	1077
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Right	Left	Right	Right	Left	Left	Right
Median Width(m)	0.0								
Link Offset(m)	0.0								
Crosswalk Width(m)	4.8								
Two way Left Turn Lane									
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	15	25	15	15	25	25	15
Sign Control	Yield								

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 55.8%		ICU Level of Service B	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	199	0	600
Future Volume (vph)	0	0	0	199	0	600
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.88
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	0	0	1879	0	2811
Flt Permitted						
Satd. Flow (perm)	0	0	0	1879	0	2811
Link Speed (k/h)	50			50	50	
Link Distance (m)	62.9			162.7	37.0	
Travel Time (s)	4.5			11.7	2.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	216	0	652
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	216	0	652
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	0.0	
Link Offset(m)	0.0			3.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 24.3%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	0	199	1030	0
Future Volume (vph)	0	0	0	199	1030	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3570	3463	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3570	3463	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	82.9			62.9	58.5	
Travel Time (s)	6.0			4.5	4.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	216	1120	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	216	1120	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Right
Median Width(m)	0.0			0.0	0.0	
Link Offset(m)	0.0			4.0	7.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Stop			Yield	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 41.6%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	1023	20	0	1066	0	5
Future Volume (vph)	1023	20	0	1066	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Frt	0.997					0.865
Flt Protected						
Satd. Flow (prot)	3559	0	0	3570	0	1625
Flt Permitted						
Satd. Flow (perm)	3559	0	0	3570	0	1625
Link Speed (k/h)	50			50	50	
Link Distance (m)	141.0			78.2	120.2	
Travel Time (s)	10.2			5.6	8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1112	22	0	1159	0	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1134	0	0	1159	0	5
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 38.9%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	246	14	168	311	15	143
Future Volume (vph)	246	14	168	311	15	143
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.993		0.912			
Flt Protected	0.955					0.995
Satd. Flow (prot)	1782	0	1714	0	0	1869
Flt Permitted	0.955					0.995
Satd. Flow (perm)	1782	0	1714	0	0	1869
Link Speed (k/h)	50		50			50
Link Distance (m)	147.8		68.9			200.0
Travel Time (s)	10.6		5.0			14.4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	267	15	183	338	16	155
Shared Lane Traffic (%)						
Lane Group Flow (vph)	282	0	521	0	0	171
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.5		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25	15		15	25	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 49.1%		ICU Level of Service A	
Analysis Period (min) 15			

1: Artera 2 & Str. Institutului Performance by approach

Approach	NB	SE	NW	All
Denied Del/Veh (s)	0.0	0.1	0.0	0.0
Total Del/Veh (s)	2.4	3.2	2.8	2.7
Stop Del/Veh (s)	0.0	0.0	0.0	0.0
Stop/Veh	0.00	0.00	0.00	0.00
Avg Speed (kph)	32	29	34	32
HC Emissions (g)	0	0	0	0
CO Emissions (g)	5	3	3	11
NOx Emissions (g)	1	0	0	1

2: Centura ocolitoare & Artera 2 Performance by approach

Approach	NW	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	1.9	0.2	0.2	0.8
Stop Del/Veh (s)	0.0	0.0	0.0	0.0
Stop/Veh	0.00	0.00	0.00	0.00
Avg Speed (kph)	26	49	47	41
HC Emissions (g)	0	1	1	1
CO Emissions (g)	3	15	10	28
NOx Emissions (g)	0	3	2	5

3: Strada 1 & Str. Instutului/Str. Institutului Performance by approach

Approach	SE	NW	NE	All
Denied Del/Veh (s)	0.0	0.0	0.4	0.2
Total Del/Veh (s)	5.6	4.7	3.7	4.1
Stop Del/Veh (s)	2.2	1.5	0.1	0.7
Stop/Veh	0.58	0.43	0.05	0.19
Avg Speed (kph)	35	27	38	36
HC Emissions (g)	0	0	4	4
CO Emissions (g)	6	15	186	207
NOx Emissions (g)	1	2	16	18

4: Str. Institutului/Str. Instutului & Strada 6 Performance by approach

Approach	SE	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.3	0.4	0.3
Stop Del/Veh (s)	0.1	0.2	0.1
Stop/Veh	0.00	0.00	0.00
Avg Speed (kph)	38	38	38
HC Emissions (g)	3	1	4
CO Emissions (g)	221	31	252
NOx Emissions (g)	12	3	15

5: Strada 2 & Str. Institutului Performance by approach

Approach	SE	NW	NE	All
Denied Del/Veh (s)	0.0	0.0	0.3	0.0
Total Del/Veh (s)	0.1	0.4	7.3	1.5
Stop Del/Veh (s)	0.0	0.1	5.5	1.0
Stop/Veh	0.00	0.02	1.00	0.19
Avg Speed (kph)	49	43	21	35
HC Emissions (g)	0	0	0	1
CO Emissions (g)	18	4	8	30
NOx Emissions (g)	2	1	1	3

6: Str. Institutului & Strada 5 Performance by approach

Approach	SE	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.1	0.3	0.2
Stop Del/Veh (s)	0.1	0.0	0.0
Stop/Veh	0.00	0.00	0.00
Avg Speed (kph)	44	36	39
HC Emissions (g)	1	1	2
CO Emissions (g)	36	89	125
NOx Emissions (g)	3	5	8

7: Strada 3/Strada 4 & Str. Institutului Performance by approach

Approach	SE	NW	NE	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Total Del/Veh (s)	3.7	3.4	3.0	3.5
Stop Del/Veh (s)	0.0	0.1	0.3	0.1
Stop/Veh	0.01	0.00	0.15	0.03
Avg Speed (kph)	34	39	38	37
HC Emissions (g)	1	2	1	3
CO Emissions (g)	40	99	29	168
NOx Emissions (g)	5	8	2	15

8: Str. Institutului & Str. Fanarului & Stada acces cartier Performance by approach

Approach	WB	SB	SE	NW	All
Denied Del/Veh (s)	0.0	0.2	0.0	0.0	0.0
Total Del/Veh (s)	4.9	6.2	11.7	3.7	7.7
Stop Del/Veh (s)	1.9	3.1	7.9	0.7	4.4
Stop/Veh	0.45	0.49	0.74	0.14	0.53
Avg Speed (kph)	21	35	32	39	33
HC Emissions (g)	0	1	5	2	9
CO Emissions (g)	12	40	300	128	480
NOx Emissions (g)	2	3	20	9	35

9: DN73 & Str. Fanarului/Str. Institutului Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.0	7.2	2.7	5.6
Stop Del/Veh (s)	0.7	1.4	0.3	1.0
Stop/Veh	0.17	0.31	0.00	0.23
Avg Speed (kph)	32	36	32	35
HC Emissions (g)	4	8	0	12
CO Emissions (g)	232	390	21	643
NOx Emissions (g)	17	35	2	54

10: DN73 & Artera nod rutier Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.2	0.0	0.0
Total Del/Veh (s)	5.8	1.8	2.7	2.7
Stop Del/Veh (s)	3.9	0.5	0.4	0.7
Stop/Veh	0.75	0.24	0.16	0.20
Avg Speed (kph)	30	36	30	31
HC Emissions (g)	0	0	5	5
CO Emissions (g)	36	11	281	327
NOx Emissions (g)	2	1	24	26

11: Artera nod rutier & Legatura giratie Performance by approach

Approach	WB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	5.1	3.2	4.9
Stop Del/Veh (s)	0.7	0.1	0.6
Stop/Veh	0.10	0.00	0.09
Avg Speed (kph)	30	34	30
HC Emissions (g)	3	1	4
CO Emissions (g)	214	39	253
NOx Emissions (g)	16	2	18

12: Legatura giratie & DN1 - Cal Fagarasului & Legatura nod rutier & Legatura Performance by app

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	1.1	1.9	7.1	2.6
Stop Del/Veh (s)	0.2	0.0	6.2	1.2
Stop/Veh	0.01	0.00	0.60	0.11
Avg Speed (kph)	37	32	15	31
HC Emissions (g)	6	1	0	7
CO Emissions (g)	352	36	11	399
NOx Emissions (g)	25	4	1	30

13: Acces centru comercial Hornbach & Artera nod rutier & DN1 & DN1 - Cal Fagarasului Performa

Approach	EB	NE	SW	All
Denied Del/Veh (s)	0.0	3.7	0.0	0.1
Total Del/Veh (s)	4.2	3.9	3.8	4.0
Stop Del/Veh (s)	0.2	1.5	1.3	0.9
Stop/Veh	0.07	0.33	0.31	0.21
Avg Speed (kph)	31	25	22	26
HC Emissions (g)	1	0	2	3
CO Emissions (g)	47	3	77	127
NOx Emissions (g)	7	0	11	18

14: Legatura & Str. Fanarului Performance by approach

Approach	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.8	0.3	0.4
Stop Del/Veh (s)	0.1	0.0	0.0
Stop/Veh	0.00	0.00	0.00
Avg Speed (kph)	42	17	31
HC Emissions (g)	2	0	2
CO Emissions (g)	86	13	99
NOx Emissions (g)	6	2	9

21: Artera 3 & Artera 2 Performance by approach

Approach	NW	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.7	2.7
Stop Del/Veh (s)	0.0	0.0
Stop/Veh	0.00	0.00
Avg Speed (kph)	21	21
HC Emissions (g)	0	0
CO Emissions (g)	21	21
NOx Emissions (g)	2	2

28: Legatura nod rutier & DN1 - Cal Fagarasului/Str. Fanarului Performance by approach

Approach	WB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	8.7	0.6	2.5
Stop Del/Veh (s)	5.2	0.0	1.2
Stop/Veh	0.52	0.01	0.13
Avg Speed (kph)	22	25	24
HC Emissions (g)	0	3	3
CO Emissions (g)	12	164	176
NOx Emissions (g)	1	15	16

29: Acces centru cxomercial Arabesc & DN1/DN1 Performance by approach

Approach	EB	WB	NE	All
Denied Del/Veh (s)	0.4	0.0	0.1	0.2
Total Del/Veh (s)	1.1	0.6	0.1	0.8
Stop Del/Veh (s)	0.0	0.2	0.0	0.1
Stop/Veh	0.00	0.00	0.00	0.00
Avg Speed (kph)	44	35	33	39
HC Emissions (g)	2	6	0	8
CO Emissions (g)	78	399	1	477
NOx Emissions (g)	9	25	0	33

Total Network Performance

Denied Del/Veh (s)	0.3
Total Del/Veh (s)	10.7
Stop Del/Veh (s)	2.9
Stop/Veh	0.45
Avg Speed (kph)	38
HC Emissions (g)	125
CO Emissions (g)	6019
NOx Emissions (g)	505

Intersection: 1: Artera 2 & Str. Institutului

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 2: Centura ocolitoare & Artera 2

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 3: Strada 1 & Str. Instutului/Str. Institutului

Movement	SE	NW	NW	NE
Directions Served	UTR	<L	T	<L
Maximum Queue (m)	16.5	15.5	9.2	15.2
Average Queue (m)	12.4	10.2	7.3	9.1
95th Queue (m)	17.8	14.5	13.3	14.5
Link Distance (m)	176.4	82.8	82.8	212.8
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: Str. Institutului/Str. Instutului & Strada 6

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 5: Strada 2 & Str. Institutului

Movement	NW	NE
Directions Served	LT	LR
Maximum Queue (m)	9.1	21.9
Average Queue (m)	1.8	15.9
95th Queue (m)	7.8	22.7
Link Distance (m)	38.2	97.0
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Str. Institutului & Strada 5

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 7: Strada 3/Strada 4 & Str. Institutului

Movement	SE	NE
Directions Served	T	LTR
Maximum Queue (m)	9.0	9.4
Average Queue (m)	1.8	5.4
95th Queue (m)	7.8	12.7
Link Distance (m)	89.6	192.2
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Str. Institutului & Str. Fanarului & Stada acces cartier

Movement	WB	SB	SE	SE	NW	NW
Directions Served	ULR	LR	<L	T	T	R>
Maximum Queue (m)	23.4	15.4	34.4	21.3	9.2	13.3
Average Queue (m)	19.5	9.7	26.7	13.6	5.2	6.3
95th Queue (m)	26.8	18.9	34.6	25.4	12.2	15.2
Link Distance (m)	43.1	247.6	362.6	362.6	369.1	369.1
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 9: DN73 & Str. Fanarului/Str. Institutului

Movement	EB	EB	WB	WB
Directions Served	T	R	L	T
Maximum Queue (m)	8.8	17.9	16.1	9.0
Average Queue (m)	7.8	5.7	12.8	3.6
95th Queue (m)	11.0	17.9	23.4	10.8
Link Distance (m)	202.6	202.6	369.1	369.1
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 10: DN73 & Artera nod rutier

Movement	EB	NB
Directions Served	L	L
Maximum Queue (m)	8.8	9.3
Average Queue (m)	8.6	7.2
95th Queue (m)	9.2	13.2
Link Distance (m)	169.8	91.1
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 11: Artera nod rutier & Legatura giratie

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 12: Legatura giratie & DN1 - Cal Fagarasului & Legatura nod rutier & Legatura

Movement	NB
Directions Served	>
Maximum Queue (m)	39.9
Average Queue (m)	27.5
95th Queue (m)	43.6
Link Distance (m)	27.6
Upstream Blk Time (%)	6
Queuing Penalty (veh)	26
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 13: Acces centru comercial Hornbach & Artera nod rutier & DN1 & DN1 - Cal Fagarasu

Movement	EB	NE	NE	SW	SW	SW
Directions Served	T	L	R>	<L	R	R
Maximum Queue (m)	15.9	9.2	8.9	15.6	15.9	18.0
Average Queue (m)	9.7	1.8	3.5	8.5	14.0	3.6
95th Queue (m)	19.4	7.9	10.5	16.7	18.6	15.4
Link Distance (m)	80.5	75.5		42.4	42.4	42.4
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)			20.0			
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 14: Legatura & Str. Fanarului

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 21: Artera 3 & Artera 2

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 28: Legatura nod rutier & DN1 - Cal Fagarasului/Str. Fanarului

Movement	WB	WB	NW
Directions Served	T	T	L
Maximum Queue (m)	22.9	22.3	9.2
Average Queue (m)	14.3	13.6	1.8
95th Queue (m)	22.5	27.3	7.9
Link Distance (m)	91.7	91.7	77.7
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 29: Acces centru cxomercial Arabesc & DN1/DN1

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Network Summary

Network wide Queuing Penalty: 26

Lane Group	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Volume (vph)	0	82	35	0	0	52
Future Volume (vph)	0	82	35	0	0	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected						
Satd. Flow (prot)	1625	0	1879	0	0	1879
Flt Permitted						
Satd. Flow (perm)	1625	0	1879	0	0	1879
Link Speed (k/h)	50		50			50
Link Distance (m)	91.6		78.6			107.2
Travel Time (s)	6.6		5.7			7.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	89	38	0	0	57
Shared Lane Traffic (%)						
Lane Group Flow (vph)	89	0	38	0	0	57
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.5		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25	15		15	25	
Sign Control	Yield		Yield			Yield

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 15.1%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	498	0	497	0	0	497	82
Future Volume (vph)	0	0	0	0	0	498	0	497	0	0	497	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	0.0		75.0	0.0		75.0
Storage Lanes	0		1	0		1	0		1	0		1
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt						0.865						0.850
Flt Protected												
Satd. Flow (prot)	0	0	1879	0	0	1625	0	3570	1879	0	3570	1597
Flt Permitted												
Satd. Flow (perm)	0	0	1879	0	0	1625	0	3570	1879	0	3570	1597
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		61.1			65.9			113.1			97.2	
Travel Time (s)		4.4			4.7			8.1			7.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	541	0	540	0	0	540	89
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	0	541	0	540	0	0	540	89
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Free			Free			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 51.2%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBR	SET	SER	NWL2	NWL	NWT	NEL2	NEL	NER
Lane Configurations										
Traffic Volume (vph)	0	0	35	82	82	99	52	399	0	399
Future Volume (vph)	0	0	35	82	82	99	52	399	0	399
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.97	0.95
Frt			0.905						0.925	
Flt Protected						0.950			0.976	
Satd. Flow (prot)	1879	1879	1700	0	0	1785	1879	0	3291	0
Flt Permitted						0.950			0.976	
Satd. Flow (perm)	1879	1879	1700	0	0	1785	1879	0	3291	0
Link Speed (k/h)	50		50				50		50	
Link Distance (m)	73.2		214.4				120.6		242.2	
Travel Time (s)	5.3		15.4				8.7		17.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	38	89	89	108	57	434	0	434
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	127	0	0	197	57	0	868	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left	Left	Left	Left	Right
Median Width(m)	3.5		0.0				3.5		10.0	
Link Offset(m)	0.0		0.0				0.0		0.0	
Crosswalk Width(m)	4.8		4.8				4.8		4.8	
Two way Left Turn Lane										
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25	15		15	25	25		25	25	15
Sign Control	Yield		Yield				Yield		Yield	

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 47.3%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations		↑↑	↑↑			↱
Traffic Volume (vph)	0	434	233	0	0	0
Future Volume (vph)	0	434	233	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	3570	3570	0	0	1879
Flt Permitted						
Satd. Flow (perm)	0	3570	3570	0	0	1879
Link Speed (k/h)		50	50		50	
Link Distance (m)		120.6	52.4		75.7	
Travel Time (s)		8.7	3.8		5.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	472	253	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	472	253	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		0.0	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25			15	25	15
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 15.3%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	422	12	12	173	60	60
Future Volume (vph)	422	12	12	173	60	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.996				0.932	
Flt Protected				0.997	0.976	
Satd. Flow (prot)	3556	0	0	3559	1709	0
Flt Permitted				0.997	0.976	
Satd. Flow (perm)	3556	0	0	3559	1709	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	52.4			52.9	108.8	
Travel Time (s)	3.8			3.8	7.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	459	13	13	188	65	65
Shared Lane Traffic (%)						
Lane Group Flow (vph)	472	0	0	201	130	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	3.5	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 27.5%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations		↑↑	↑↑↱			↱
Traffic Volume (vph)	0	482	185	0	0	0
Future Volume (vph)	0	482	185	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	3570	3570	0	0	1879
Flt Permitted						
Satd. Flow (perm)	0	3570	3570	0	0	1879
Link Speed (k/h)		50	50		50	
Link Distance (m)		52.9	121.5		75.0	
Travel Time (s)		3.8	8.7		5.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	524	201	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	524	201	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		0.0	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25			15	25	15
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 16.7%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	467	15	15	109	0	76	0	76	0	0	0
Future Volume (vph)	0	467	15	15	109	0	76	0	76	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995						0.932				
Flt Protected					0.994			0.976				
Satd. Flow (prot)	0	3552	0	0	3548	0	0	1709	0	0	1879	0
Flt Permitted					0.994			0.976				
Satd. Flow (perm)	0	3552	0	0	3548	0	0	1709	0	0	1879	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		121.5			415.4			216.7			81.6	
Travel Time (s)		8.7			29.9			15.6			5.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	508	16	16	118	0	83	0	83	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	524	0	0	134	0	0	166	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Yield			Yield			Yield			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 30.3%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	WBL	WBR	SBL	SBR	SEL2	SEL	SET	NWT	NWR	NWR2
Lane Configurations										
Traffic Volume (vph)	240	124	194	1	2	396	145	51	56	171
Future Volume (vph)	240	124	194	1	2	396	145	51	56	171
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt	0.954		0.999						0.850	
Flt Protected	0.968		0.953			0.950	0.977			
Satd. Flow (prot)	1735	0	1789	0	0	1696	1744	1879	1597	0
Flt Permitted	0.968		0.953			0.950	0.977			
Satd. Flow (perm)	1735	0	1789	0	0	1696	1744	1879	1597	0
Link Speed (k/h)	50		50				50	50		
Link Distance (m)	81.3		277.3				415.4	424.1		
Travel Time (s)	5.9		20.0				29.9	30.5		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	261	135	211	1	2	430	158	55	61	186
Shared Lane Traffic (%)						33%				
Lane Group Flow (vph)	396	0	212	0	0	290	300	55	247	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left	Left	Left	Right	Right
Median Width(m)	3.5		3.5				3.5	0.0		
Link Offset(m)	0.0		0.0				0.0	0.0		
Crosswalk Width(m)	4.8		4.8				4.8	4.8		
Two way Left Turn Lane										
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25	15	25	15	25	25			15	15
Sign Control	Yield		Yield				Yield	Yield		

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 63.2%		ICU Level of Service B	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	94	430	422	157	3	176
Future Volume (vph)	94	430	422	157	3	176
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.867	
Flt Protected			0.950		0.999	
Satd. Flow (prot)	1879	1597	1785	1879	1627	0
Flt Permitted			0.950		0.999	
Satd. Flow (perm)	1879	1597	1785	1879	1627	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	239.7			424.1	129.6	
Travel Time (s)	17.3			30.5	9.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	102	467	459	171	3	191
Shared Lane Traffic (%)						
Lane Group Flow (vph)	102	467	459	171	194	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			3.5	3.5	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Yield			Yield	Yield	

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 56.7%		ICU Level of Service B	
Analysis Period (min) 15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	100	20	90	79	500	352
Future Volume (vph)	100	20	90	79	500	352
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	0.0	0.0			25.0
Storage Lanes	1	1	1			1
Taper Length (m)	7.5		7.5			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1785	1597	1785	1879	1879	1597
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1785	1597	1785	1879	1879	1597
Link Speed (k/h)	50			50	50	
Link Distance (m)	204.4			97.6	129.6	
Travel Time (s)	14.7			7.0	9.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	22	98	86	543	383
Shared Lane Traffic (%)						
Lane Group Flow (vph)	109	22	98	86	543	383
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.5			3.5	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25	15	25			15
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 46.8%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	WBR	WBR2	SBL	SBR	SEL
Lane Configurations					
Traffic Volume (vph)	0	442	0	0	120
Future Volume (vph)	0	442	0	0	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97
Frt		0.865			
Flt Protected					0.950
Satd. Flow (prot)	0	1625	0	0	3463
Flt Permitted					0.950
Satd. Flow (perm)	0	1625	0	0	3463
Link Speed (k/h)	50		50		50
Link Distance (m)	204.4		71.2		216.3
Travel Time (s)	14.7		5.1		15.6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	480	0	0	130
Shared Lane Traffic (%)					
Lane Group Flow (vph)	0	480	0	0	130
Enter Blocked Intersection	No	No	No	No	No
Lane Alignment	Right	Right	Left	Right	Left
Median Width(m)	0.0		0.0		7.0
Link Offset(m)	0.0		0.0		0.0
Crosswalk Width(m)	4.8		4.8		4.8
Two way Left Turn Lane					
Headway Factor	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	15	15	25	15	25
Sign Control	Yield		Yield		Yield

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 30.7%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	WBR	WBR2	NBR2
Lane Configurations				
Traffic Volume (vph)	891	981	524	442
Future Volume (vph)	891	981	524	442
Ideal Flow (vphpl)	1900	1900	1900	1900
Storage Length (m)		20.0		
Storage Lanes		1		
Taper Length (m)				
Lane Util. Factor	0.95	0.88	1.00	1.00
Frt		0.850	0.850	0.865
Flt Protected				
Satd. Flow (prot)	3570	2811	1597	1625
Flt Permitted				
Satd. Flow (perm)	3570	2811	1597	1625
Link Speed (k/h)	50			
Link Distance (m)	182.0			
Travel Time (s)	13.1			
Peak Hour Factor	0.92	0.92	0.92	0.92
Adj. Flow (vph)	968	1066	570	480
Shared Lane Traffic (%)				
Lane Group Flow (vph)	968	1066	570	480
Enter Blocked Intersection	No	No	No	No
Lane Alignment	Left	Right	Right	Right
Median Width(m)	0.0			
Link Offset(m)	0.0			
Crosswalk Width(m)	4.8			
Two way Left Turn Lane				
Headway Factor	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	15	15
Sign Control	Free			

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 58.7%		ICU Level of Service B	
Analysis Period (min) 15			

Lane Group	EBT	EBR	EBR2	NEL	NER	NER2	SWL2	SWL	SWR
Lane Configurations									
Traffic Volume (vph)	723	100	26	25	32	10	136	10	995
Future Volume (vph)	723	100	26	25	32	10	136	10	995
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)		0.0		0.0	20.0			0.0	0.0
Storage Lanes		1		1	1			1	2
Taper Length (m)				7.5				7.5	
Lane Util. Factor	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.88
Frt		0.850			0.850				0.850
Flt Protected				0.950				0.950	
Satd. Flow (prot)	3570	1597	0	1785	1597	0	0	1785	2811
Flt Permitted				0.950				0.950	
Satd. Flow (perm)	3570	1597	0	1785	1597	0	0	1785	2811
Link Speed (k/h)	50								
Link Distance (m)	114.1								
Travel Time (s)	8.2								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	786	109	28	27	35	11	148	11	1082
Shared Lane Traffic (%)									
Lane Group Flow (vph)	786	137	0	27	46	0	0	159	1082
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Right	Left	Right	Right	Left	Left	Right
Median Width(m)	0.0								
Link Offset(m)	0.0								
Crosswalk Width(m)	4.8								
Two way Left Turn Lane									
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	15	25	15	15	25	25	15
Sign Control	Yield								

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 44.8%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	0	160	0	524
Future Volume (vph)	0	0	0	160	0	524
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.88
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	0	0	1879	0	2811
Flt Permitted						
Satd. Flow (perm)	0	0	0	1879	0	2811
Link Speed (k/h)	50			50	50	
Link Distance (m)	118.8			239.7	43.4	
Travel Time (s)	8.6			17.3	3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	174	0	570
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	174	0	570
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	0.0	
Link Offset(m)	0.0			3.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 21.7%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	0	82	0	0
Future Volume (vph)	0	0	0	82	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1879	0	0	1879	0	1879
Flt Permitted						
Satd. Flow (perm)	1879	0	0	1879	0	1879
Link Speed (k/h)	50			50	50	
Link Distance (m)	59.5			61.1	173.5	
Travel Time (s)	4.3			4.4	12.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	89	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	89	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Free			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 7.6%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	0	160	981	0
Future Volume (vph)	0	0	0	160	981	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3570	3463	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3570	3463	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	80.7			118.8	103.6	
Travel Time (s)	5.8			8.6	7.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	174	1066	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	174	1066	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Right	Right
Median Width(m)	0.0			0.0	0.0	
Link Offset(m)	0.0			4.0	7.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Stop			Yield	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 39.1%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	844	20	0	1020	0	5
Future Volume (vph)	844	20	0	1020	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)		0.0	0.0		0.0	20.0
Storage Lanes		0	0		0	0
Taper Length (m)			7.5		7.5	
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Frt	0.996					0.865
Flt Protected						
Satd. Flow (prot)	3556	0	0	3570	0	1625
Flt Permitted						
Satd. Flow (perm)	3556	0	0	3570	0	1625
Link Speed (k/h)	50			50	50	
Link Distance (m)	169.5			114.1	100.9	
Travel Time (s)	12.2			8.2	7.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	917	22	0	1109	0	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	939	0	0	1109	0	5
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Right	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Free			Free	Yield	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 34.0%		ICU Level of Service A	
Analysis Period (min) 15			

1: Artera 2 & Str. Institutului Performance by approach

Approach	NB	SE	NW	All
Denied Del/Veh (s)	0.0	0.1	0.0	0.0
Total Del/Veh (s)	2.9	3.3	3.4	3.0
Stop Del/Veh (s)	0.1	0.0	0.0	0.0
Stop/Veh	0.02	0.00	0.00	0.02
Avg Speed (kph)	30	29	34	30
HC Emissions (g)	1	0	0	1
CO Emissions (g)	25	3	5	33
NOx Emissions (g)	4	0	1	5

2: Cerntura ocolitoare & Artera 2 Performance by approach

Approach	NW	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	1.3	0.1	1.3	0.9
Stop Del/Veh (s)	0.0	0.0	0.0	0.0
Stop/Veh	0.00	0.00	0.00	0.00
Avg Speed (kph)	28	49	37	40
HC Emissions (g)	0	1	1	2
CO Emissions (g)	1	11	34	46
NOx Emissions (g)	0	2	3	5

3: Strada 1 & Str. Institutului Performance by approach

Approach	SE	NW	NE	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Total Del/Veh (s)	5.8	5.4	2.9	5.0
Stop Del/Veh (s)	1.9	2.0	0.1	1.5
Stop/Veh	0.31	0.36	0.04	0.27
Avg Speed (kph)	33	27	40	33
HC Emissions (g)	1	0	1	3
CO Emissions (g)	31	19	52	102
NOx Emissions (g)	5	2	4	12

4: Str. Institutului & Strada 6 Performance by approach

Approach	SE	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.5	0.2	0.3
Stop Del/Veh (s)	0.1	0.0	0.1
Stop/Veh	0.00	0.00	0.00
Avg Speed (kph)	36	45	39
HC Emissions (g)	2	0	2
CO Emissions (g)	127	19	146
NOx Emissions (g)	7	2	9

5: Strada 2 & Str. Institutului Performance by approach

Approach	SE	NW	NE	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.0
Total Del/Veh (s)	0.3	0.3	4.2	0.5
Stop Del/Veh (s)	0.0	0.0	2.7	0.1
Stop/Veh	0.00	0.00	1.00	0.05
Avg Speed (kph)	44	45	26	42
HC Emissions (g)	0	0	0	1
CO Emissions (g)	7	8	1	16
NOx Emissions (g)	1	1	0	2

6: Str. Institutului & Strada 5 Performance by approach

Approach	SE	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.1	0.2	0.2
Stop Del/Veh (s)	0.0	0.0	0.0
Stop/Veh	0.00	0.00	0.00
Avg Speed (kph)	46	36	38
HC Emissions (g)	0	3	3
CO Emissions (g)	19	202	221
NOx Emissions (g)	1	11	12

7: Strada 3/Strada 4 & Str. Institutului Performance by approach

Approach	SE	NW	NE	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.0
Total Del/Veh (s)	3.3	4.5	3.0	4.0
Stop Del/Veh (s)	0.0	0.1	0.4	0.1
Stop/Veh	0.00	0.00	0.17	0.01
Avg Speed (kph)	33	39	38	38
HC Emissions (g)	0	5	0	6
CO Emissions (g)	20	280	11	311
NOx Emissions (g)	2	22	1	25

8: Str. Institutului & Str. Fanarului & Stada acces cartier Performance by approach

Approach	WB	SB	SE	NW	All
Denied Del/Veh (s)	0.0	0.2	0.0	0.0	0.0
Total Del/Veh (s)	4.6	6.8	4.5	4.6	4.7
Stop Del/Veh (s)	1.4	3.7	1.3	0.6	1.2
Stop/Veh	0.26	0.57	0.29	0.17	0.26
Avg Speed (kph)	22	35	38	38	36
HC Emissions (g)	0	0	3	5	9
CO Emissions (g)	20	20	148	275	462
NOx Emissions (g)	3	2	10	21	36

9: DN73 & Str. Fanarului/Str. Institutului Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	3.9	4.7	3.2	3.9
Stop Del/Veh (s)	0.4	0.7	0.4	0.5
Stop/Veh	0.12	0.10	0.00	0.08
Avg Speed (kph)	32	38	30	35
HC Emissions (g)	5	4	1	10
CO Emissions (g)	281	226	59	566
NOx Emissions (g)	22	17	7	46

10: DN73 & Artera nod rutier Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0	0.0
Total Del/Veh (s)	10.4	2.1	1.2	3.6
Stop Del/Veh (s)	8.4	0.8	0.1	2.2
Stop/Veh	0.67	0.18	0.06	0.23
Avg Speed (kph)	25	35	34	30
HC Emissions (g)	2	0	3	5
CO Emissions (g)	118	18	217	353
NOx Emissions (g)	6	2	15	23

11: Artera nod rutier & Legatura giratie Performance by approach

Approach	WB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.8	3.4	4.1
Stop Del/Veh (s)	0.9	0.2	0.6
Stop/Veh	0.15	0.02	0.09
Avg Speed (kph)	30	33	32
HC Emissions (g)	2	2	4
CO Emissions (g)	130	138	268
NOx Emissions (g)	11	9	20

12: Legatura giratie & DN1 - Cal Fagarasului & Legatura nod rutier & Legatura Performance by app

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	2.2	6.0	12.0	5.3
Stop Del/Veh (s)	0.4	0.2	12.1	1.5
Stop/Veh	0.03	0.10	0.80	0.15
Avg Speed (kph)	36	24	12	27
HC Emissions (g)	8	1	0	10
CO Emissions (g)	501	97	9	607
NOx Emissions (g)	37	10	1	48

13: Acces centru cxomercial Hornbach & Artera nod rutier & DN1 & DN1 - Cal Fagarasului Perform

Approach	EB	NE	SW	All
Denied Del/Veh (s)	0.0	0.1	0.0	0.0
Total Del/Veh (s)	4.8	8.7	4.6	5.1
Stop Del/Veh (s)	0.9	6.3	2.2	2.0
Stop/Veh	0.21	0.65	0.38	0.33
Avg Speed (kph)	29	17	21	23
HC Emissions (g)	1	0	2	3
CO Emissions (g)	53	8	97	158
NOx Emissions (g)	7	1	13	21

14: Legatura & Str. Fanarului Performance by approach

Approach	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.3	0.3	0.3
Stop Del/Veh (s)	0.1	0.0	0.0
Stop/Veh	0.00	0.00	0.00
Avg Speed (kph)	43	17	30
HC Emissions (g)	2	0	2
CO Emissions (g)	99	15	114
NOx Emissions (g)	6	3	8

21: Artera 3 & Artera 2 Performance by approach

Approach	NW	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.0	3.0
Stop Del/Veh (s)	0.0	0.0
Stop/Veh	0.00	0.00
Avg Speed (kph)	20	20
HC Emissions (g)	2	2
CO Emissions (g)	97	97
NOx Emissions (g)	9	9

28: Legatura nod rutier & DN1 - Cal Fagarasului/Str. Fanarului Performance by approach

Approach	WB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	12.1	1.1	2.7
Stop Del/Veh (s)	8.5	0.0	1.3
Stop/Veh	0.59	0.01	0.09
Avg Speed (kph)	19	25	23
HC Emissions (g)	0	3	3
CO Emissions (g)	10	161	171
NOx Emissions (g)	1	18	19

29: Acces centru cxomercial Arabesc & DN1/DN1 Performance by approach

Approach	EB	WB	NE	All
Denied Del/Veh (s)	0.5	0.0	0.1	0.2
Total Del/Veh (s)	1.1	0.8	3.6	1.0
Stop Del/Veh (s)	0.0	0.3	3.9	0.2
Stop/Veh	0.01	0.01	1.00	0.01
Avg Speed (kph)	45	34	22	39
HC Emissions (g)	3	7	0	10
CO Emissions (g)	129	492	0	621
NOx Emissions (g)	11	31	0	42

Total Network Performance

Denied Del/Veh (s)	0.4
Total Del/Veh (s)	13.5
Stop Del/Veh (s)	3.1
Stop/Veh	0.42
Avg Speed (kph)	37
HC Emissions (g)	140
CO Emissions (g)	6969
NOx Emissions (g)	581

Intersection: 1: Artera 2 & Str. Institutului

Movement	NB
Directions Served	LR
Maximum Queue (m)	8.8
Average Queue (m)	1.8
95th Queue (m)	7.6
Link Distance (m)	66.5
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Cerntura ocolitoare & Artera 2

Movement				
Directions Served				
Maximum Queue (m)				
Average Queue (m)				
95th Queue (m)				
Link Distance (m)				
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Strada 1 & Str. Institutului

Movement	SE	NW	NW	NE
Directions Served	UTR	<L	T	<L
Maximum Queue (m)	29.8	22.7	9.2	8.2
Average Queue (m)	14.9	15.5	3.7	3.3
95th Queue (m)	28.0	25.2	11.0	9.9
Link Distance (m)	176.4	82.8	82.8	212.8
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: Str. Institutului & Strada 6

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 5: Strada 2 & Str. Institutului

Movement	NE
Directions Served	LR
Maximum Queue (m)	9.3
Average Queue (m)	7.2
95th Queue (m)	13.2
Link Distance (m)	97.0
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 6: Str. Institutului & Strada 5

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 7: Strada 3/Strada 4 & Str. Institutului

Movement	NE
Directions Served	LTR
Maximum Queue (m)	9.3
Average Queue (m)	3.7
95th Queue (m)	11.2
Link Distance (m)	187.2
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 8: Str. Institutului & Str. Fanarului & Stada acces cartier

Movement	WB	SB	SE	SE	NW	NW
Directions Served	ULR	LR	<L	T	T	R>
Maximum Queue (m)	29.4	16.2	15.9	14.9	9.2	16.8
Average Queue (m)	19.9	11.7	10.6	6.6	5.5	8.2
95th Queue (m)	28.9	19.1	17.4	16.2	12.8	19.5
Link Distance (m)	43.1	247.6	357.4	357.4	369.1	369.1
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 9: DN73 & Str. Fanarului/Str. Institutului

Movement	EB	EB	WB	WB
Directions Served	T	R	L	T
Maximum Queue (m)	16.7	10.3	16.0	14.2
Average Queue (m)	6.5	5.9	3.2	2.8
95th Queue (m)	19.7	13.9	13.8	12.3
Link Distance (m)	202.6	202.6	369.1	369.1
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 10: DN73 & Artera nod rutier

Movement	EB	NB	SB
Directions Served	L	L	R
Maximum Queue (m)	27.8	9.3	16.7
Average Queue (m)	17.9	9.1	5.6
95th Queue (m)	28.4	9.4	17.2
Link Distance (m)	169.8	91.1	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			25.0
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 11: Artera nod rutier & Legatura giratie

Movement	SE
Directions Served	<L
Maximum Queue (m)	9.2
Average Queue (m)	1.8
95th Queue (m)	7.9
Link Distance (m)	162.3
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 12: Legatura giratie & DN1 - Cal Fagarasului & Legatura nod rutier & Legatura

Movement	WB	WB	WB	B89	NB
Directions Served	R	R	>	T	>
Maximum Queue (m)	46.5	44.9	25.3	16.7	41.0
Average Queue (m)	9.3	11.8	5.1	3.3	27.7
95th Queue (m)	40.0	39.7	21.8	14.4	44.9
Link Distance (m)	103.0	103.0		61.4	27.6
Upstream Blk Time (%)					9
Queuing Penalty (veh)					29
Storage Bay Dist (m)			20.0		
Storage Blk Time (%)		1	0		
Queuing Penalty (veh)		5	0		

Intersection: 13: Acces centru cxomercial Hornbach & Artera nod rutier & DN1 & DN1 - Cal Fagaras

Movement	EB	EB	EB	NE	NE	SW	SW
Directions Served	T	T	R>	L	R>	<L	R
Maximum Queue (m)	16.4	21.9	7.3	16.2	14.8	27.7	15.7
Average Queue (m)	14.2	8.0	2.9	13.9	10.4	19.9	12.8
95th Queue (m)	19.0	21.3	8.8	17.9	14.2	27.6	18.6
Link Distance (m)	77.0	77.0	77.0	75.5	75.5	46.8	46.8
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (m)							
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 14: Legatura & Str. Fanarului

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 21: Artera 3 & Artera 2

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 28: Legatura nod rutier & DN1 - Cal Fagarasului/Str. Fanarului

Movement	WB	WB	NW
Directions Served	T	T	L
Maximum Queue (m)	20.2	9.3	6.6
Average Queue (m)	12.6	7.3	1.3
95th Queue (m)	20.2	13.3	5.7
Link Distance (m)	91.7	91.7	77.7
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 29: Acces centru cxomercial Arabesc & DN1/DN1

Movement	NE
Directions Served	R
Maximum Queue (m)	6.6
Average Queue (m)	2.6
95th Queue (m)	7.9
Link Distance (m)	78.9
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 35

Lane Group	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Volume (vph)	0	431	67	0	0	52
Future Volume (vph)	0	431	67	0	0	52
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected						
Satd. Flow (prot)	1625	0	1879	0	0	1879
Flt Permitted						
Satd. Flow (perm)	1625	0	1879	0	0	1879
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	468	73	0	0	57
Shared Lane Traffic (%)						
Lane Group Flow (vph)	468	0	73	0	0	57
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.5		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25	15		15	25	
Sign Control	Yield		Yield			Yield

Intersection Summary			
Control Type: Roundabout			
Intersection Capacity Utilization 36.9%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	212	0	497	0	0	497	431
Future Volume (vph)	0	0	0	0	0	212	0	497	0	0	497	431
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt						0.865						0.850
Flt Protected												
Satd. Flow (prot)	0	0	1879	0	0	1625	0	3570	1879	0	3570	1597
Flt Permitted												
Satd. Flow (perm)	0	0	1879	0	0	1625	0	3570	1879	0	3570	1597
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	230	0	540	0	0	540	468
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	0	230	0	540	0	0	540	468
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Free			Free			Free			Free	

Intersection Summary			
Control Type: Unsignalized			
Intersection Capacity Utilization 33.5%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBR	SET	SER	NWL2	NWL	NWT	NEL2	NEL	NER
Lane Configurations										
Traffic Volume (vph)	0	0	176	322	322	54	52	158	0	158
Future Volume (vph)	0	0	176	322	322	54	52	158	0	158
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.97	0.95
Frt			0.913						0.925	
Flt Protected						0.950			0.976	
Satd. Flow (prot)	1879	1879	1715	0	0	1785	1879	0	3291	0
Flt Permitted						0.950			0.976	
Satd. Flow (perm)	1879	1879	1715	0	0	1785	1879	0	3291	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	191	350	350	59	57	172	0	172
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	541	0	0	409	57	0	344	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left	Left	Left	Left	Right
Median Width(m)	3.5		0.0				3.5		10.0	
Link Offset(m)	0.0		0.0				0.0		0.0	
Crosswalk Width(m)	4.8		4.8				4.8		4.8	
Two way Left Turn Lane										
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25	15		15	25	25		25	25	15
Sign Control	Yield		Yield				Yield		Yield	

Intersection Summary			
Control Type: Roundabout			
Intersection Capacity Utilization 69.4%		ICU Level of Service C	
Analysis Period (min) 15			

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	0	334	428	0	0	0
Future Volume (vph)	0	334	428	0	0	0
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	3570	3570	0	0	1879
Flt Permitted						
Satd. Flow (perm)	0	3570	3570	0	0	1879
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	363	465	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	363	465	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		0.0	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25			15	25	15
Sign Control		Free	Free		Stop	

Intersection Summary			
Control Type: Unsignalized			
Intersection Capacity Utilization 15.2%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	286	48	48	404	24	24
Future Volume (vph)	286	48	48	404	24	24
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.979				0.932	
Flt Protected				0.995	0.976	
Satd. Flow (prot)	3495	0	0	3552	1709	0
Flt Permitted				0.995	0.976	
Satd. Flow (perm)	3495	0	0	3552	1709	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	311	52	52	439	26	26
Shared Lane Traffic (%)						
Lane Group Flow (vph)	363	0	0	491	52	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	3.5	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Free			Free	Stop	

Intersection Summary			
Control Type: Unsignalized			
Intersection Capacity Utilization 35.3%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	0	310	452	0	0	0
Future Volume (vph)	0	310	452	0	0	0
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	3570	3570	0	0	1879
Flt Permitted						
Satd. Flow (perm)	0	3570	3570	0	0	1879
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	337	491	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	337	491	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		0.0	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25			15	25	15
Sign Control		Free	Free		Stop	

Intersection Summary			
Control Type: Unsignalized			
Intersection Capacity Utilization 15.8%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	249	61	61	422	0	30	0	30	0	0	0
Future Volume (vph)	0	249	61	61	422	0	30	0	30	0	0	0
Lane Util. Factor	1.00	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.971						0.932				
Flt Protected					0.994			0.976				
Satd. Flow (prot)	0	3466	0	0	3548	0	0	1709	0	0	1879	0
Flt Permitted					0.994			0.976				
Satd. Flow (perm)	0	3466	0	0	3548	0	0	1709	0	0	1879	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	271	66	66	459	0	33	0	33	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	337	0	0	525	0	0	66	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Yield			Yield			Yield			Stop	

Intersection Summary			
Control Type: Roundabout			
Intersection Capacity Utilization 35.8%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	WBL	WBR	SBL	SBR	SEL2	SEL	SET	NWT	NWR	NWR2
Lane Configurations										
Traffic Volume (vph)	246	345	92	2	2	177	100	136	132	311
Future Volume (vph)	246	345	92	2	2	177	100	136	132	311
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.921		0.997						0.850	
Flt Protected	0.980		0.953			0.950				
Satd. Flow (prot)	1696	0	1785	0	0	1785	1879	1879	1597	0
Flt Permitted	0.980		0.953			0.950				
Satd. Flow (perm)	1696	0	1785	0	0	1785	1879	1879	1597	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	267	375	100	2	2	192	109	148	143	338
Shared Lane Traffic (%)										
Lane Group Flow (vph)	642	0	102	0	0	194	109	148	481	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left	Left	Left	Right	Right
Median Width(m)	3.5		3.5				3.5	0.0		
Link Offset(m)	0.0		0.0				0.0	0.0		
Crosswalk Width(m)	4.8		4.8				4.8	4.8		
Two way Left Turn Lane										
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25	15	25	15	25	25			15	15
Sign Control	Yield		Yield				Yield	Yield		

Intersection Summary		
Control Type: Roundabout		
Intersection Capacity Utilization 70.4%	ICU Level of Service C	
Analysis Period (min) 15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	217	383	247	191	8	362
Future Volume (vph)	217	383	247	191	8	362
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.868	
Flt Protected			0.950		0.999	
Satd. Flow (prot)	1879	1597	1785	1879	1629	0
Flt Permitted			0.950		0.999	
Satd. Flow (perm)	1879	1597	1785	1879	1629	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	236	416	268	208	9	393
Shared Lane Traffic (%)						
Lane Group Flow (vph)	236	416	268	208	402	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			3.5	3.5	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Yield			Yield	Yield	

Intersection Summary		
Control Type: Roundabout		
Intersection Capacity Utilization 58.0%		ICU Level of Service B
Analysis Period (min) 15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	200	95	101	170	400	230
Future Volume (vph)	200	95	101	170	400	230
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1785	1597	1785	1879	1879	1597
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1785	1597	1785	1879	1879	1597
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	217	103	110	185	435	250
Shared Lane Traffic (%)						
Lane Group Flow (vph)	217	103	110	185	435	250
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.5			3.5	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25	15	25			15
Sign Control	Stop			Free	Free	

Intersection Summary			
Control Type: Unsignalized			
Intersection Capacity Utilization 47.7%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	WBR	WBR2	SBL	SBR	SEL
Lane Configurations					
Traffic Volume (vph)	0	331	0	0	295
Future Volume (vph)	0	331	0	0	295
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97
Frt		0.865			
Flt Protected					0.950
Satd. Flow (prot)	0	1625	0	0	3463
Flt Permitted					0.950
Satd. Flow (perm)	0	1625	0	0	3463
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	360	0	0	321
Shared Lane Traffic (%)					
Lane Group Flow (vph)	0	360	0	0	321
Enter Blocked Intersection	No	No	No	No	No
Lane Alignment	Right	Right	Left	Right	Left
Median Width(m)	0.0		0.0		7.0
Link Offset(m)	0.0		0.0		0.0
Crosswalk Width(m)	4.8		4.8		4.8
Two way Left Turn Lane					
Headway Factor	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	15	15	25	15	25
Sign Control	Yield		Yield		Yield

Intersection Summary		
Control Type: Roundabout		
Intersection Capacity Utilization 23.8%		ICU Level of Service A
Analysis Period (min) 15		

Lane Group	EBT	WBR	WBR2	NBR2
Lane Configurations				
Traffic Volume (vph)	1117	1030	600	331
Future Volume (vph)	1117	1030	600	331
Lane Util. Factor	0.95	0.88	1.00	1.00
Frt		0.850	0.850	0.865
Flt Protected				
Satd. Flow (prot)	3570	2811	1597	1625
Flt Permitted				
Satd. Flow (perm)	3570	2811	1597	1625
Peak Hour Factor	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1214	1120	652	360
Shared Lane Traffic (%)				
Lane Group Flow (vph)	1214	1120	652	360
Enter Blocked Intersection	No	No	No	No
Lane Alignment	Left	Right	Right	Right
Median Width(m)	0.0			
Link Offset(m)	0.0			
Crosswalk Width(m)	4.8			
Two way Left Turn Lane				
Headway Factor	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	15	15
Sign Control	Free			

Intersection Summary		
Control Type: Unsignalized		
Intersection Capacity Utilization 58.0%		ICU Level of Service B
Analysis Period (min) 15		

Lane Group	EBT	EBR	EBR2	NEL	NER	NER2	SWL2	SWL	SWR
Lane Configurations									
Traffic Volume (vph)	808	200	70	75	121	45	188	50	991
Future Volume (vph)	808	200	70	75	121	45	188	50	991
Lane Util. Factor	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.88
Frt		0.850			0.850				0.850
Flt Protected				0.950				0.950	
Satd. Flow (prot)	3570	1597	0	1785	1597	0	0	1785	2811
Flt Permitted				0.950				0.950	
Satd. Flow (perm)	3570	1597	0	1785	1597	0	0	1785	2811
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	878	217	76	82	132	49	204	54	1077
Shared Lane Traffic (%)									
Lane Group Flow (vph)	878	293	0	82	181	0	0	258	1077
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Right	Left	Right	Right	Left	Left	Right
Median Width(m)	0.0								
Link Offset(m)	0.0								
Crosswalk Width(m)	4.8								
Two way Left Turn Lane									
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	15	25	15	15	25	25	15
Sign Control	Yield								

Intersection Summary			
Control Type: Roundabout			
Intersection Capacity Utilization 55.8%		ICU Level of Service B	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	0	199	0	600
Future Volume (vph)	0	0	0	199	0	600
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.88
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	0	0	1879	0	2811
Flt Permitted						
Satd. Flow (perm)	0	0	0	1879	0	2811
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	216	0	652
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	216	0	652
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	0.0	
Link Offset(m)	0.0			3.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Stop			Free	Free	

Intersection Summary			
Control Type: Unsignalized			
Intersection Capacity Utilization 24.3%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	0	431	0	0
Future Volume (vph)	0	0	0	431	0	0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1879	0	0	1879	0	1879
Flt Permitted						
Satd. Flow (perm)	1879	0	0	1879	0	1879
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	468	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	468	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Free			Free	Free	

Intersection Summary			
Control Type: Unsignalized			
Intersection Capacity Utilization 26.0%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	0	199	1030	0
Future Volume (vph)	0	0	0	199	1030	0
Lane Util. Factor	1.00	1.00	1.00	0.95	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3570	3463	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3570	3463	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	216	1120	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	216	1120	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Right	Right	Left	Right
Median Width(m)	0.0			0.0	0.0	
Link Offset(m)	0.0			4.0	7.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Stop			Yield	Free	

Intersection Summary			
Control Type: Unsignalized			
Intersection Capacity Utilization 41.6%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	1073	20	0	1066	0	5
Future Volume (vph)	1073	20	0	1066	0	5
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Frt	0.997					0.865
Flt Protected						
Satd. Flow (prot)	3559	0	0	3570	0	1625
Flt Permitted						
Satd. Flow (perm)	3559	0	0	3570	0	1625
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1166	22	0	1159	0	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1188	0	0	1159	0	5
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Right	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Free			Free	Yield	

Intersection Summary			
Control Type: Unsignalized			
Intersection Capacity Utilization 40.3%		ICU Level of Service A	
Analysis Period (min) 15			

1: Artera 2 & Str. Institutului Performance by approach

Approach	NB	SE	NW	All
Denied Del/Veh (s)	0.0	0.1	0.0	0.0
Total Del/Veh (s)	2.5	2.9	3.3	2.7
Stop Del/Veh (s)	0.0	0.0	0.0	0.0
Stop/Veh	0.00	0.00	0.00	0.00
Avg Speed (kph)	32	29	33	32
HC Emissions (g)	0	0	0	0
CO Emissions (g)	8	1	3	12
NOx Emissions (g)	1	0	0	2

2: Cerntura ocolitoare & Artera 2 Performance by approach

Approach	NW	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	2.2	0.3	0.4	0.8
Stop Del/Veh (s)	0.0	0.0	0.0	0.0
Stop/Veh	0.00	0.00	0.00	0.00
Avg Speed (kph)	24	48	45	41
HC Emissions (g)	0	1	1	2
CO Emissions (g)	3	21	19	43
NOx Emissions (g)	0	4	3	7

3: Strada 1 & Str. Institutului Performance by approach

Approach	SE	NW	NE	All
Denied Del/Veh (s)	0.0	0.0	0.4	0.2
Total Del/Veh (s)	5.8	4.5	5.0	5.0
Stop Del/Veh (s)	2.4	1.6	0.9	1.2
Stop/Veh	0.60	0.35	0.13	0.23
Avg Speed (kph)	35	28	35	34
HC Emissions (g)	0	0	4	4
CO Emissions (g)	8	10	196	214
NOx Emissions (g)	1	1	17	20

4: Str. Institutului & Strada 6 Performance by approach

Approach	SE	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.4	0.2	0.3
Stop Del/Veh (s)	0.1	0.1	0.1
Stop/Veh	0.00	0.00	0.00
Avg Speed (kph)	37	42	38
HC Emissions (g)	4	0	4
CO Emissions (g)	244	18	261
NOx Emissions (g)	14	2	15

5: Strada 2 & Str. Institutului Performance by approach

Approach	SE	NW	NE	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.0
Total Del/Veh (s)	0.1	0.1	5.2	0.7
Stop Del/Veh (s)	0.0	0.0	4.2	0.5
Stop/Veh	0.00	0.00	1.00	0.12
Avg Speed (kph)	48	47	24	40
HC Emissions (g)	0	0	0	1
CO Emissions (g)	14	3	2	18
NOx Emissions (g)	2	1	0	2

6: Str. Institutului & Strada 5 Performance by approach

Approach	SE	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.1	0.5	0.2
Stop Del/Veh (s)	0.0	0.2	0.1
Stop/Veh	0.00	0.00	0.00
Avg Speed (kph)	45	36	39
HC Emissions (g)	1	2	2
CO Emissions (g)	25	110	135
NOx Emissions (g)	3	6	9

7: Strada 3/Strada 4 & Str. Institutului Performance by approach

Approach	SE	NW	NE	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.0
Total Del/Veh (s)	3.7	3.7	3.8	3.7
Stop Del/Veh (s)	0.0	0.2	1.1	0.3
Stop/Veh	0.02	0.06	0.32	0.08
Avg Speed (kph)	33	39	36	36
HC Emissions (g)	1	2	1	3
CO Emissions (g)	40	93	34	168
NOx Emissions (g)	5	7	2	15

8: Str. Institutului & Str. Fanarului & Stada acces cartier Performance by approach

Approach	WB	SB	SE	NW	All
Denied Del/Veh (s)	0.0	0.2	0.0	0.0	0.0
Total Del/Veh (s)	4.7	8.3	31.7	4.2	17.2
Stop Del/Veh (s)	1.5	4.9	29.5	0.7	14.4
Stop/Veh	0.40	0.60	0.77	0.21	0.56
Avg Speed (kph)	21	32	21	39	25
HC Emissions (g)	0	1	5	2	9
CO Emissions (g)	10	50	311	122	494
NOx Emissions (g)	1	4	21	10	36

9: DN73 & Str. Fanarului/Str. Institutului Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	5.9	6.6	2.8	5.9
Stop Del/Veh (s)	2.1	1.2	0.3	1.5
Stop/Veh	0.22	0.22	0.00	0.20
Avg Speed (kph)	29	36	31	33
HC Emissions (g)	5	7	0	13
CO Emissions (g)	288	358	24	670
NOx Emissions (g)	22	32	2	56

10: DN73 & Artera nod rutier Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.2	0.0	0.0
Total Del/Veh (s)	9.9	2.7	2.9	3.4
Stop Del/Veh (s)	8.2	1.2	0.4	1.1
Stop/Veh	0.61	0.33	0.15	0.21
Avg Speed (kph)	25	33	30	30
HC Emissions (g)	1	0	4	5
CO Emissions (g)	44	11	235	290
NOx Emissions (g)	2	1	24	27

11: Artera nod rutier & Legatura giratie Performance by approach

Approach	WB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	5.8	2.8	5.4
Stop Del/Veh (s)	1.5	0.1	1.3
Stop/Veh	0.16	0.00	0.14
Avg Speed (kph)	28	34	29
HC Emissions (g)	3	1	4
CO Emissions (g)	205	42	247
NOx Emissions (g)	16	3	19

12: Legatura giratie & DN1 - Cal Fagarasului & Legatura nod rutier & Legatura Performance by app

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	1.9	3.7	12.3	4.3
Stop Del/Veh (s)	0.3	0.0	11.5	1.7
Stop/Veh	0.02	0.01	0.71	0.11
Avg Speed (kph)	36	28	12	28
HC Emissions (g)	8	1	0	9
CO Emissions (g)	517	58	15	590
NOx Emissions (g)	37	6	1	44

13: Acces centru cxomercial Hornbach & Artera nod rutier & DN1 & DN1 - Cal Fagarasului Perform

Approach	EB	NE	SW	All
Denied Del/Veh (s)	0.0	1.5	0.0	0.0
Total Del/Veh (s)	4.8	21.3	5.0	5.2
Stop Del/Veh (s)	0.5	18.8	2.5	2.0
Stop/Veh	0.11	0.67	0.43	0.32
Avg Speed (kph)	30	10	19	23
HC Emissions (g)	1	0	2	3
CO Emissions (g)	63	3	89	155
NOx Emissions (g)	8	0	13	21

14: Legatura & Str. Fanarului Performance by approach

Approach	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.9	0.4	0.5
Stop Del/Veh (s)	0.1	0.0	0.0
Stop/Veh	0.02	0.00	0.01
Avg Speed (kph)	41	17	30
HC Emissions (g)	2	0	2
CO Emissions (g)	104	14	118
NOx Emissions (g)	7	2	9

21: Artera 3 & Artera 2 Performance by approach

Approach	NW	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	2.8	2.8
Stop Del/Veh (s)	0.0	0.0
Stop/Veh	0.00	0.00
Avg Speed (kph)	21	21
HC Emissions (g)	1	1
CO Emissions (g)	32	32
NOx Emissions (g)	3	3

28: Legatura nod rutier & DN1 - Cal Fagarasului/Str. Fanarului Performance by approach

Approach	WB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	46.2	1.1	7.7
Stop Del/Veh (s)	42.3	0.0	6.3
Stop/Veh	0.88	0.02	0.15
Avg Speed (kph)	7	25	18
HC Emissions (g)	0	4	4
CO Emissions (g)	15	213	228
NOx Emissions (g)	1	23	24

29: Acces centru cxomercial Arabesc & DN1/DN1 Performance by approach

Approach	EB	WB	All
Denied Del/Veh (s)	0.5	0.0	0.2
Total Del/Veh (s)	1.6	0.9	1.2
Stop Del/Veh (s)	0.1	0.3	0.3
Stop/Veh	0.02	0.01	0.01
Avg Speed (kph)	43	34	37
HC Emissions (g)	2	9	11
CO Emissions (g)	99	572	671
NOx Emissions (g)	11	38	49

Total Network Performance

Denied Del/Veh (s)	0.4
Total Del/Veh (s)	15.6
Stop Del/Veh (s)	6.7
Stop/Veh	0.47
Avg Speed (kph)	36
HC Emissions (g)	149
CO Emissions (g)	7136
NOx Emissions (g)	616

Intersection: 1: Artera 2 & Str. Institutului

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 2: Cerntura ocolitoare & Artera 2

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 3: Strada 1 & Str. Institutului

Movement	SE	NW	NW	NE
Directions Served	UTR	<L	T	<L
Maximum Queue (m)	16.2	15.4	9.2	37.3
Average Queue (m)	10.6	10.1	5.3	16.3
95th Queue (m)	15.2	14.5	12.6	37.1
Link Distance (m)	176.4	82.8	82.8	212.8
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: Str. Institutului & Strada 6

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 5: Strada 2 & Str. Institutului

Movement	NE
Directions Served	LR
Maximum Queue (m)	16.5
Average Queue (m)	12.0
95th Queue (m)	17.4
Link Distance (m)	97.0
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 6: Str. Institutului & Strada 5

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 7: Strada 3/Strada 4 & Str. Institutului

Movement	SE	NW	NE
Directions Served	T	LT	LTR
Maximum Queue (m)	9.2	9.3	15.6
Average Queue (m)	3.6	3.7	10.8
95th Queue (m)	11.0	11.2	14.9
Link Distance (m)	89.6	362.6	192.2
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: Str. Institutului & Str. Fanarului & Stada acces cartier

Movement	WB	SB	SE	SE	NW	NW
Directions Served	ULR>	LR	<L	T	T	R>
Maximum Queue (m)	22.4	22.2	87.9	16.3	9.2	12.8
Average Queue (m)	14.2	16.0	68.4	14.5	3.7	6.5
95th Queue (m)	22.3	22.9	91.6	19.0	11.1	15.4
Link Distance (m)	43.1	247.6	362.6	362.6	369.1	369.1
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 9: DN73 & Str. Fanarului/Str. Institutului

Movement	EB	EB	WB	WB
Directions Served	T	R	L	T
Maximum Queue (m)	34.1	16.9	22.3	15.6
Average Queue (m)	12.1	8.9	7.9	6.6
95th Queue (m)	31.1	18.0	21.4	16.4
Link Distance (m)	202.6	202.6	369.1	369.1
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 10: DN73 & Artera nod rutier

Movement	EB	NB	SB
Directions Served	L	L	R
Maximum Queue (m)	20.5	15.6	16.9
Average Queue (m)	9.5	8.6	9.0
95th Queue (m)	20.2	16.9	21.5
Link Distance (m)	169.8	91.1	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			25.0
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 11: Artera nod rutier & Legatura giratie

Movement	WB
Directions Served	>
Maximum Queue (m)	15.6
Average Queue (m)	3.1
95th Queue (m)	13.4
Link Distance (m)	169.8
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 12: Legatura giratie & DN1 - Cal Fagarasului & Legatura nod rutier & Legatura

Movement	NB
Directions Served	>
Maximum Queue (m)	40.6
Average Queue (m)	29.3
95th Queue (m)	47.0
Link Distance (m)	27.6
Upstream Blk Time (%)	17
Queuing Penalty (veh)	88
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 13: Acces centru cxomercial Hornbach & Artera nod rutier & DN1 & DN1 - Cal Fagaras

Movement	EB	EB	NE	SW	SW	SW
Directions Served	T	T	L	<L	R	R
Maximum Queue (m)	16.7	8.8	22.0	33.6	24.5	27.3
Average Queue (m)	14.8	1.8	6.2	16.7	19.2	17.1
95th Queue (m)	20.0	7.5	20.5	31.7	25.4	32.5
Link Distance (m)	80.5	80.5	75.5	42.4	42.4	42.4
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)						
Storage Blk Time (%)			2			
Queuing Penalty (veh)			1			

Intersection: 14: Legatura & Str. Fanarului

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 21: Artera 3 & Artera 2

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 28: Legatura nod rutier & DN1 - Cal Fagarasului/Str. Fanarului

Movement	WB	WB	NW
Directions Served	T	T	L
Maximum Queue (m)	33.9	32.2	16.3
Average Queue (m)	24.7	22.2	6.2
95th Queue (m)	37.2	33.4	16.2
Link Distance (m)	91.7	91.7	77.7
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 29: Acces centru cxomercial Arabesc & DN1/DN1

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Network Summary

Network wide Queuing Penalty: 89

Lane Group	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Volume (vph)	0	109	35	0	0	52
Future Volume (vph)	0	109	35	0	0	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected						
Satd. Flow (prot)	1625	0	1879	0	0	1879
Flt Permitted						
Satd. Flow (perm)	1625	0	1879	0	0	1879
Link Speed (k/h)	50		50			50
Link Distance (m)	91.6		78.6			107.2
Travel Time (s)	6.6		5.7			7.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	0	142	46	0	0	68
Shared Lane Traffic (%)						
Lane Group Flow (vph)	142	0	46	0	0	68
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.5		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25	15		15	25	
Sign Control	Yield		Yield			Yield

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 18.1%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	535	0	784	0	0	784	109
Future Volume (vph)	0	0	0	0	0	535	0	784	0	0	784	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	0.0		75.0	0.0		75.0
Storage Lanes	0		1	0		1	0		1	0		1
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt						0.865						0.850
Flt Protected												
Satd. Flow (prot)	0	0	1879	0	0	1625	0	3570	1879	0	3570	1597
Flt Permitted												
Satd. Flow (perm)	0	0	1879	0	0	1625	0	3570	1879	0	3570	1597
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		61.1			65.9			113.1			97.2	
Travel Time (s)		4.4			4.7			8.1			7.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%	120%	100%	120%	120%	100%	120%
Adj. Flow (vph)	0	0	0	0	0	698	0	852	0	0	852	142
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	0	698	0	852	0	0	852	142
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Free			Free			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 68.1%		ICU Level of Service C	
Analysis Period (min) 15			

Lane Group	EBL	EBR	SET	SER	NWL2	NWL	NWT	NEL2	NEL	NER
Lane Configurations										
Traffic Volume (vph)	0	0	62	82	82	136	52	399	0	399
Future Volume (vph)	0	0	62	82	82	136	52	399	0	399
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.97	0.95
Frt			0.923						0.925	
Flt Protected						0.950			0.976	
Satd. Flow (prot)	1879	1879	1734	0	0	1785	1879	0	3291	0
Flt Permitted						0.950			0.976	
Satd. Flow (perm)	1879	1879	1734	0	0	1785	1879	0	3291	0
Link Speed (k/h)	50		50				50		50	
Link Distance (m)	73.2		214.4				120.6		242.2	
Travel Time (s)	5.3		15.4				8.7		17.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	0	0	81	107	107	177	68	520	0	520
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	188	0	0	284	68	0	1040	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left	Left	Left	Left	Right
Median Width(m)	3.5		0.0				3.5		10.0	
Link Offset(m)	0.0		0.0				0.0		0.0	
Crosswalk Width(m)	4.8		4.8				4.8		4.8	
Two way Left Turn Lane										
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25	15		15	25	25		25	25	15
Sign Control	Yield		Yield				Yield		Yield	

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 63.2%		ICU Level of Service B	
Analysis Period (min) 15			

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	0	461	270	0	0	0
Future Volume (vph)	0	461	270	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	3570	3570	0	0	1879
Flt Permitted						
Satd. Flow (perm)	0	3570	3570	0	0	1879
Link Speed (k/h)		50	50		50	
Link Distance (m)		120.6	52.4		75.7	
Travel Time (s)		8.7	3.8		5.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	0	601	352	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	601	352	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		0.0	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25			15	25	15
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 18.6%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	449	12	12	210	60	60
Future Volume (vph)	449	12	12	210	60	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.996				0.932	
Flt Protected				0.997	0.976	
Satd. Flow (prot)	3556	0	0	3559	1709	0
Flt Permitted				0.997	0.976	
Satd. Flow (perm)	3556	0	0	3559	1709	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	52.4			52.9	108.8	
Travel Time (s)	3.8			3.8	7.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	586	16	16	274	78	78
Shared Lane Traffic (%)						
Lane Group Flow (vph)	602	0	0	290	156	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	3.5	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 32.8%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	0	509	222	0	0	0
Future Volume (vph)	0	509	222	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	3570	3570	0	0	1879
Flt Permitted						
Satd. Flow (perm)	0	3570	3570	0	0	1879
Link Speed (k/h)		50	50		50	
Link Distance (m)		52.9	121.5		75.0	
Travel Time (s)		3.8	8.7		5.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	0	664	290	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	664	290	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		0.0	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25			15	25	15
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 20.2%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	494	15	15	146	0	76	0	76	0	0	0
Future Volume (vph)	0	494	15	15	146	0	76	0	76	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995						0.932				
Flt Protected					0.995			0.976				
Satd. Flow (prot)	0	3552	0	0	3552	0	0	1709	0	0	1879	0
Flt Permitted					0.995			0.976				
Satd. Flow (perm)	0	3552	0	0	3552	0	0	1709	0	0	1879	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		121.5			415.4			216.7			81.6	
Travel Time (s)		8.7			29.9			15.6			5.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	0	644	20	20	190	0	99	0	99	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	664	0	0	210	0	0	198	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Yield			Yield			Yield			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 36.1%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	WBL	WBR	WBR2	SBL	SBR	SEL2	SEL	SET	NWT	NWR	NWR2
Lane Configurations											
Traffic Volume (vph)	240	109	8	194	1	2	423	145	51	48	171
Future Volume (vph)	240	109	8	194	1	2	423	145	51	48	171
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt	0.956			0.999						0.850	
Flt Protected	0.967			0.953			0.950	0.976			
Satd. Flow (prot)	1737	0	0	1789	0	0	1696	1742	1879	1597	0
Flt Permitted	0.967			0.953			0.950	0.976			
Satd. Flow (perm)	1737	0	0	1789	0	0	1696	1742	1879	1597	0
Link Speed (k/h)	50			50				50	50		
Link Distance (m)	81.3			277.3				415.4	424.1		
Travel Time (s)	5.9			20.0				29.9	30.5		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	313	142	10	253	1	3	552	189	67	63	223
Shared Lane Traffic (%)							34%				
Lane Group Flow (vph)	465	0	0	254	0	0	367	377	67	286	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Right	Left	Right	Left	Left	Left	Left	Right	Right
Median Width(m)	3.5			3.5				3.5	0.0		
Link Offset(m)	0.0			0.0				0.0	0.0		
Crosswalk Width(m)	4.8			4.8				4.8	4.8		
Two way Left Turn Lane											
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25	15	15	25	15	25	25			15	15
Sign Control	Yield			Yield				Yield	Yield		

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 72.9%		ICU Level of Service C	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	94	430	422	157	3	176
Future Volume (vph)	94	430	422	157	3	176
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.867	
Flt Protected			0.950		0.999	
Satd. Flow (prot)	1879	1597	1785	1879	1627	0
Flt Permitted			0.950		0.999	
Satd. Flow (perm)	1879	1597	1785	1879	1627	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	239.7			424.1	129.6	
Travel Time (s)	17.3			30.5	9.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	123	561	550	205	4	230
Shared Lane Traffic (%)						
Lane Group Flow (vph)	123	561	550	205	234	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			3.5	3.5	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Yield			Yield	Yield	

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 66.7%		ICU Level of Service C	
Analysis Period (min) 15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	100	20	90	79	500	352
Future Volume (vph)	100	20	90	79	500	352
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	0.0	0.0			25.0
Storage Lanes	1	1	1			1
Taper Length (m)	7.5		7.5			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1785	1597	1785	1879	1879	1597
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1785	1597	1785	1879	1879	1597
Link Speed (k/h)	50			50	50	
Link Distance (m)	204.4			97.6	129.6	
Travel Time (s)	14.7			7.0	9.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	130	26	117	103	652	459
Shared Lane Traffic (%)						
Lane Group Flow (vph)	130	26	117	103	652	459
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.5			3.5	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25	15	25			15
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 54.2%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	WBR	WBR2	SBL	SBR	SEL
Lane Configurations					
Traffic Volume (vph)	0	442	0	0	120
Future Volume (vph)	0	442	0	0	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97
Frt		0.865			
Flt Protected					0.950
Satd. Flow (prot)	0	1625	0	0	3463
Flt Permitted					0.950
Satd. Flow (perm)	0	1625	0	0	3463
Link Speed (k/h)	50		50		50
Link Distance (m)	204.4		71.2		216.3
Travel Time (s)	14.7		5.1		15.6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%
Adj. Flow (vph)	0	577	0	0	157
Shared Lane Traffic (%)					
Lane Group Flow (vph)	0	577	0	0	157
Enter Blocked Intersection	No	No	No	No	No
Lane Alignment	Right	Right	Left	Right	Left
Median Width(m)	0.0		0.0		7.0
Link Offset(m)	0.0		0.0		0.0
Crosswalk Width(m)	4.8		4.8		4.8
Two way Left Turn Lane					
Headway Factor	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	15	15	25	15	25
Sign Control	Yield		Yield		Yield

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 36.2%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	WBR	WBR2	NBR2
Lane Configurations				
Traffic Volume (vph)	891	981	524	442
Future Volume (vph)	891	981	524	442
Ideal Flow (vphpl)	1900	1900	1900	1900
Storage Length (m)		20.0		
Storage Lanes		1		
Taper Length (m)				
Lane Util. Factor	0.95	0.88	1.00	1.00
Frt		0.850	0.850	0.865
Flt Protected				
Satd. Flow (prot)	3570	2811	1597	1625
Flt Permitted				
Satd. Flow (perm)	3570	2811	1597	1625
Link Speed (k/h)	50			
Link Distance (m)	182.0			
Travel Time (s)	13.1			
Peak Hour Factor	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%
Adj. Flow (vph)	1162	1280	683	577
Shared Lane Traffic (%)				
Lane Group Flow (vph)	1162	1280	683	577
Enter Blocked Intersection	No	No	No	No
Lane Alignment	Left	Right	Right	Right
Median Width(m)	0.0			
Link Offset(m)	0.0			
Crosswalk Width(m)	4.8			
Two way Left Turn Lane				
Headway Factor	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	15	15
Sign Control	Free			

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 69.1%		ICU Level of Service C	
Analysis Period (min) 15			

Lane Group	EBT	EBR	EBR2	NEL	NER	NER2	SWL2	SWL	SWR
Lane Configurations									
Traffic Volume (vph)	723	100	26	25	32	10	136	10	995
Future Volume (vph)	723	100	26	25	32	10	136	10	995
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)		0.0		0.0	20.0			0.0	0.0
Storage Lanes		1		1	1			1	2
Taper Length (m)				7.5				7.5	
Lane Util. Factor	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.88
Frt		0.850			0.850				0.850
Flt Protected				0.950				0.950	
Satd. Flow (prot)	3570	1597	0	1785	1597	0	0	1785	2811
Flt Permitted				0.950				0.950	
Satd. Flow (perm)	3570	1597	0	1785	1597	0	0	1785	2811
Link Speed (k/h)	50								
Link Distance (m)	114.1								
Travel Time (s)	8.2								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	943	130	34	33	42	13	177	13	1298
Shared Lane Traffic (%)									
Lane Group Flow (vph)	943	164	0	33	55	0	0	190	1298
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Right	Left	Right	Right	Left	Left	Right
Median Width(m)	0.0								
Link Offset(m)	0.0								
Crosswalk Width(m)	4.8								
Two way Left Turn Lane									
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	15	25	15	15	25	25	15
Sign Control	Yield								

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 51.8%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	0	160	0	524
Future Volume (vph)	0	0	0	160	0	524
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.88
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	0	0	1879	0	2811
Flt Permitted						
Satd. Flow (perm)	0	0	0	1879	0	2811
Link Speed (k/h)	50			50	50	
Link Distance (m)	118.8			239.7	43.4	
Travel Time (s)	8.6			17.3	3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	0	0	0	209	0	683
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	209	0	683
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	0.0	
Link Offset(m)	0.0			3.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 25.3%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	0	109	0	0
Future Volume (vph)	0	0	0	109	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1879	0	0	1879	0	1879
Flt Permitted						
Satd. Flow (perm)	1879	0	0	1879	0	1879
Link Speed (k/h)	50			50	50	
Link Distance (m)	59.5			61.1	173.5	
Travel Time (s)	4.3			4.4	12.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	0	0	0	142	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	142	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Free			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 10.2%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	0	160	981	0
Future Volume (vph)	0	0	0	160	981	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3570	3463	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3570	3463	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	80.7			118.8	103.6	
Travel Time (s)	5.8			8.6	7.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	0	0	0	209	1280	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	209	1280	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Right	Right
Median Width(m)	0.0			0.0	0.0	
Link Offset(m)	0.0			4.0	7.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Stop			Yield	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 45.6%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	844	20	0	1020	0	5
Future Volume (vph)	844	20	0	1020	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)		0.0	0.0		0.0	20.0
Storage Lanes		0	0		0	0
Taper Length (m)			7.5		7.5	
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Frt	0.997					0.865
Flt Protected						
Satd. Flow (prot)	3559	0	0	3570	0	1625
Flt Permitted						
Satd. Flow (perm)	3559	0	0	3570	0	1625
Link Speed (k/h)	50			50	50	
Link Distance (m)	169.5			114.1	100.9	
Travel Time (s)	12.2			8.2	7.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	120%	120%	120%	120%	120%	120%
Adj. Flow (vph)	1101	26	0	1330	0	7
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1127	0	0	1330	0	7
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Right	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Free			Free	Yield	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 38.8%		ICU Level of Service A	
Analysis Period (min) 15			

1: Artera 2 & Str. Institutului Performance by approach

Approach	NB	SE	NW	All
Denied Del/Veh (s)	0.0	0.1	0.0	0.0
Total Del/Veh (s)	2.9	3.3	3.4	3.0
Stop Del/Veh (s)	0.1	0.0	0.0	0.0
Stop/Veh	0.02	0.00	0.00	0.02
Avg Speed (kph)	30	29	34	30
HC Emissions (g)	1	0	0	1
CO Emissions (g)	25	3	5	33
NOx Emissions (g)	4	0	1	5

2: Cerntura ocolitoare & Artera 2 Performance by approach

Approach	NW	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	1.3	0.1	1.3	0.9
Stop Del/Veh (s)	0.0	0.0	0.0	0.0
Stop/Veh	0.00	0.00	0.00	0.00
Avg Speed (kph)	28	49	37	40
HC Emissions (g)	0	1	1	2
CO Emissions (g)	1	11	34	46
NOx Emissions (g)	0	2	3	5

3: Strada 1 & Str. Institutului Performance by approach

Approach	SE	NW	NE	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Total Del/Veh (s)	5.8	5.4	2.9	5.0
Stop Del/Veh (s)	1.9	2.0	0.1	1.5
Stop/Veh	0.31	0.36	0.04	0.27
Avg Speed (kph)	33	27	40	33
HC Emissions (g)	1	0	1	3
CO Emissions (g)	31	19	52	102
NOx Emissions (g)	5	2	4	12

4: Str. Institutului & Strada 6 Performance by approach

Approach	SE	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.5	0.2	0.3
Stop Del/Veh (s)	0.1	0.0	0.1
Stop/Veh	0.00	0.00	0.00
Avg Speed (kph)	36	45	39
HC Emissions (g)	2	0	2
CO Emissions (g)	127	19	146
NOx Emissions (g)	7	2	9

5: Strada 2 & Str. Institutului Performance by approach

Approach	SE	NW	NE	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.0
Total Del/Veh (s)	0.3	0.3	4.2	0.5
Stop Del/Veh (s)	0.0	0.0	2.7	0.1
Stop/Veh	0.00	0.00	1.00	0.05
Avg Speed (kph)	44	45	26	42
HC Emissions (g)	0	0	0	1
CO Emissions (g)	7	8	1	16
NOx Emissions (g)	1	1	0	2

6: Str. Institutului & Strada 5 Performance by approach

Approach	SE	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.1	0.2	0.2
Stop Del/Veh (s)	0.0	0.0	0.0
Stop/Veh	0.00	0.00	0.00
Avg Speed (kph)	46	36	38
HC Emissions (g)	0	3	3
CO Emissions (g)	19	202	221
NOx Emissions (g)	1	11	12

7: Strada 3/Strada 4 & Str. Institutului Performance by approach

Approach	SE	NW	NE	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.0
Total Del/Veh (s)	3.3	4.5	3.0	4.0
Stop Del/Veh (s)	0.0	0.1	0.4	0.1
Stop/Veh	0.00	0.00	0.17	0.01
Avg Speed (kph)	33	39	38	38
HC Emissions (g)	0	5	0	6
CO Emissions (g)	20	280	11	311
NOx Emissions (g)	2	22	1	25

8: Str. Institutului & Str. Fanarului & Stada acces cartier Performance by approach

Approach	WB	SB	SE	NW	All
Denied Del/Veh (s)	0.0	0.2	0.0	0.0	0.0
Total Del/Veh (s)	4.6	6.8	4.5	4.6	4.7
Stop Del/Veh (s)	1.4	3.7	1.3	0.6	1.2
Stop/Veh	0.26	0.57	0.29	0.17	0.26
Avg Speed (kph)	22	35	38	38	36
HC Emissions (g)	0	0	3	5	9
CO Emissions (g)	20	20	148	275	462
NOx Emissions (g)	3	2	10	21	36

9: DN73 & Str. Fanarului/Str. Institutului Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	3.9	4.7	3.2	3.9
Stop Del/Veh (s)	0.4	0.7	0.4	0.5
Stop/Veh	0.12	0.10	0.00	0.08
Avg Speed (kph)	32	38	30	35
HC Emissions (g)	5	4	1	10
CO Emissions (g)	281	226	59	566
NOx Emissions (g)	22	17	7	46

10: DN73 & Artera nod rutier Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0	0.0
Total Del/Veh (s)	10.4	2.1	1.2	3.6
Stop Del/Veh (s)	8.4	0.8	0.1	2.2
Stop/Veh	0.67	0.18	0.06	0.23
Avg Speed (kph)	25	35	34	30
HC Emissions (g)	2	0	3	5
CO Emissions (g)	118	18	217	353
NOx Emissions (g)	6	2	15	23

11: Artera nod rutier & Legatura giratie Performance by approach

Approach	WB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.8	3.4	4.1
Stop Del/Veh (s)	0.9	0.2	0.6
Stop/Veh	0.15	0.02	0.09
Avg Speed (kph)	30	33	32
HC Emissions (g)	2	2	4
CO Emissions (g)	130	138	268
NOx Emissions (g)	11	9	20

12: Legatura giratie & DN1 - Cal Fagarasului & Legatura nod rutier & Legatura Performance by app

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	2.2	6.0	12.0	5.3
Stop Del/Veh (s)	0.4	0.2	12.1	1.5
Stop/Veh	0.03	0.10	0.80	0.15
Avg Speed (kph)	36	24	12	27
HC Emissions (g)	8	1	0	10
CO Emissions (g)	501	97	9	607
NOx Emissions (g)	37	10	1	48

13: Acces centru cxomercial Hornbach & Artera nod rutier & DN1 & DN1 - Cal Fagarasului Perform

Approach	EB	NE	SW	All
Denied Del/Veh (s)	0.0	0.1	0.0	0.0
Total Del/Veh (s)	4.8	8.7	4.6	5.1
Stop Del/Veh (s)	0.9	6.3	2.2	2.0
Stop/Veh	0.21	0.65	0.38	0.33
Avg Speed (kph)	29	17	21	23
HC Emissions (g)	1	0	2	3
CO Emissions (g)	53	8	97	158
NOx Emissions (g)	7	1	13	21

14: Legatura & Str. Fanarului Performance by approach

Approach	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.3	0.3	0.3
Stop Del/Veh (s)	0.1	0.0	0.0
Stop/Veh	0.00	0.00	0.00
Avg Speed (kph)	43	17	30
HC Emissions (g)	2	0	2
CO Emissions (g)	99	15	114
NOx Emissions (g)	6	3	8

21: Artera 3 & Artera 2 Performance by approach

Approach	NW	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.0	3.0
Stop Del/Veh (s)	0.0	0.0
Stop/Veh	0.00	0.00
Avg Speed (kph)	20	20
HC Emissions (g)	2	2
CO Emissions (g)	97	97
NOx Emissions (g)	9	9

28: Legatura nod rutier & DN1 - Cal Fagarasului/Str. Fanarului Performance by approach

Approach	WB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	12.1	1.1	2.7
Stop Del/Veh (s)	8.5	0.0	1.3
Stop/Veh	0.59	0.01	0.09
Avg Speed (kph)	19	25	23
HC Emissions (g)	0	3	3
CO Emissions (g)	10	161	171
NOx Emissions (g)	1	18	19

29: Acces centru cxomercial Arabesc & DN1/DN1 Performance by approach

Approach	EB	WB	NE	All
Denied Del/Veh (s)	0.5	0.0	0.1	0.2
Total Del/Veh (s)	1.1	0.8	3.6	1.0
Stop Del/Veh (s)	0.0	0.3	3.9	0.2
Stop/Veh	0.01	0.01	1.00	0.01
Avg Speed (kph)	45	34	22	39
HC Emissions (g)	3	7	0	10
CO Emissions (g)	129	492	0	621
NOx Emissions (g)	11	31	0	42

Total Network Performance

Denied Del/Veh (s)	0.4
Total Del/Veh (s)	13.5
Stop Del/Veh (s)	3.1
Stop/Veh	0.42
Avg Speed (kph)	37
HC Emissions (g)	140
CO Emissions (g)	6969
NOx Emissions (g)	581

Intersection: 1: Artera 2 & Str. Institutului

Movement	NB
Directions Served	LR
Maximum Queue (m)	8.8
Average Queue (m)	1.8
95th Queue (m)	7.6
Link Distance (m)	66.5
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Cerntura ocolitoare & Artera 2

Movement	
Directions Served	
Maximum Queue (m)	
Average Queue (m)	
95th Queue (m)	
Link Distance (m)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 3: Strada 1 & Str. Institutului

Movement	SE	NW	NW	NE
Directions Served	UTR	<L	T	<L
Maximum Queue (m)	29.8	22.7	9.2	8.2
Average Queue (m)	14.9	15.5	3.7	3.3
95th Queue (m)	28.0	25.2	11.0	9.9
Link Distance (m)	176.4	82.8	82.8	212.8
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: Str. Institutului & Strada 6

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 5: Strada 2 & Str. Institutului

Movement	NE
Directions Served	LR
Maximum Queue (m)	9.3
Average Queue (m)	7.2
95th Queue (m)	13.2
Link Distance (m)	97.0
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 6: Str. Institutului & Strada 5

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 7: Strada 3/Strada 4 & Str. Institutului

Movement	NE
Directions Served	LTR
Maximum Queue (m)	9.3
Average Queue (m)	3.7
95th Queue (m)	11.2
Link Distance (m)	187.2
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 8: Str. Institutului & Str. Fanarului & Stada acces cartier

Movement	WB	SB	SE	SE	NW	NW
Directions Served	ULR	LR	<L	T	T	R>
Maximum Queue (m)	29.4	16.2	15.9	14.9	9.2	16.8
Average Queue (m)	19.9	11.7	10.6	6.6	5.5	8.2
95th Queue (m)	28.9	19.1	17.4	16.2	12.8	19.5
Link Distance (m)	43.1	247.6	357.4	357.4	369.1	369.1
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 9: DN73 & Str. Fanarului/Str. Institutului

Movement	EB	EB	WB	WB
Directions Served	T	R	L	T
Maximum Queue (m)	16.7	10.3	16.0	14.2
Average Queue (m)	6.5	5.9	3.2	2.8
95th Queue (m)	19.7	13.9	13.8	12.3
Link Distance (m)	202.6	202.6	369.1	369.1
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 10: DN73 & Artera nod rutier

Movement	EB	NB	SB
Directions Served	L	L	R
Maximum Queue (m)	27.8	9.3	16.7
Average Queue (m)	17.9	9.1	5.6
95th Queue (m)	28.4	9.4	17.2
Link Distance (m)	169.8	91.1	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			25.0
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 11: Artera nod rutier & Legatura giratie

Movement	SE
Directions Served	<L
Maximum Queue (m)	9.2
Average Queue (m)	1.8
95th Queue (m)	7.9
Link Distance (m)	162.3
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 12: Legatura giratie & DN1 - Cal Fagarasului & Legatura nod rutier & Legatura

Movement	WB	WB	WB	B89	NB
Directions Served	R	R	>	T	>
Maximum Queue (m)	46.5	44.9	25.3	16.7	41.0
Average Queue (m)	9.3	11.8	5.1	3.3	27.7
95th Queue (m)	40.0	39.7	21.8	14.4	44.9
Link Distance (m)	103.0	103.0		61.4	27.6
Upstream Blk Time (%)					9
Queuing Penalty (veh)					29
Storage Bay Dist (m)			20.0		
Storage Blk Time (%)		1	0		
Queuing Penalty (veh)		5	0		

Intersection: 13: Acces centru cxomercial Hornbach & Artera nod rutier & DN1 & DN1 - Cal Fagaras

Movement	EB	EB	EB	NE	NE	SW	SW
Directions Served	T	T	R>	L	R>	<L	R
Maximum Queue (m)	16.4	21.9	7.3	16.2	14.8	27.7	15.7
Average Queue (m)	14.2	8.0	2.9	13.9	10.4	19.9	12.8
95th Queue (m)	19.0	21.3	8.8	17.9	14.2	27.6	18.6
Link Distance (m)	77.0	77.0	77.0	75.5	75.5	46.8	46.8
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (m)							
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 14: Legatura & Str. Fanarului

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 21: Artera 3 & Artera 2

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 28: Legatura nod rutier & DN1 - Cal Fagarasului/Str. Fanarului

Movement	WB	WB	NW
Directions Served	T	T	L
Maximum Queue (m)	20.2	9.3	6.6
Average Queue (m)	12.6	7.3	1.3
95th Queue (m)	20.2	13.3	5.7
Link Distance (m)	91.7	91.7	77.7
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 29: Acces centru cxomercial Arabesc & DN1/DN1

Movement	NE
Directions Served	R
Maximum Queue (m)	6.6
Average Queue (m)	2.6
95th Queue (m)	7.9
Link Distance (m)	78.9
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 35

Lane Group	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Volume (vph)	0	431	67	0	0	52
Future Volume (vph)	0	431	67	0	0	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected						
Satd. Flow (prot)	1625	0	1879	0	0	1879
Flt Permitted						
Satd. Flow (perm)	1625	0	1879	0	0	1879
Link Speed (k/h)	50		50			50
Link Distance (m)	91.6		78.6			107.2
Travel Time (s)	6.6		5.7			7.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	468	73	0	0	57
Shared Lane Traffic (%)						
Lane Group Flow (vph)	468	0	73	0	0	57
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.5		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25	15		15	25	
Sign Control	Yield		Yield			Yield

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 36.9%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	212	0	497	0	0	497	431
Future Volume (vph)	0	0	0	0	0	212	0	497	0	0	497	431
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	0.0		75.0	0.0		75.0
Storage Lanes	0		1	0		1	0		1	0		1
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt						0.865						0.850
Flt Protected												
Satd. Flow (prot)	0	0	1879	0	0	1625	0	3570	1879	0	3570	1597
Flt Permitted												
Satd. Flow (perm)	0	0	1879	0	0	1625	0	3570	1879	0	3570	1597
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		61.1			65.9			113.1			97.2	
Travel Time (s)		4.4			4.7			8.1			7.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	230	0	540	0	0	540	468
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	0	230	0	540	0	0	540	468
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Free			Free			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 33.5%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBR	SET	SER	NWL2	NWL	NWT	NEL2	NEL	NER
Lane Configurations										
Traffic Volume (vph)	0	0	176	322	322	54	52	158	0	158
Future Volume (vph)	0	0	176	322	322	54	52	158	0	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.97	0.95
Frt			0.913						0.925	
Flt Protected						0.950			0.976	
Satd. Flow (prot)	1879	1879	1715	0	0	1785	1879	0	3291	0
Flt Permitted						0.950			0.976	
Satd. Flow (perm)	1879	1879	1715	0	0	1785	1879	0	3291	0
Link Speed (k/h)	50		50				50		50	
Link Distance (m)	73.2		214.4				120.6		242.2	
Travel Time (s)	5.3		15.4				8.7		17.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	191	350	350	59	57	172	0	172
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	541	0	0	409	57	0	344	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left	Left	Left	Left	Right
Median Width(m)	3.5		0.0				3.5		10.0	
Link Offset(m)	0.0		0.0				0.0		0.0	
Crosswalk Width(m)	4.8		4.8				4.8		4.8	
Two way Left Turn Lane										
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25	15		15	25	25		25	25	15
Sign Control	Yield		Yield				Yield		Yield	

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 69.4%		ICU Level of Service C	
Analysis Period (min) 15			

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	0	334	428	0	0	0
Future Volume (vph)	0	334	428	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	3570	3570	0	0	1879
Flt Permitted						
Satd. Flow (perm)	0	3570	3570	0	0	1879
Link Speed (k/h)		50	50		50	
Link Distance (m)		120.6	52.4		75.7	
Travel Time (s)		8.7	3.8		5.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	363	465	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	363	465	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		0.0	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25			15	25	15
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 15.2%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	286	48	48	404	24	24
Future Volume (vph)	286	48	48	404	24	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.979				0.932	
Flt Protected				0.995	0.976	
Satd. Flow (prot)	3495	0	0	3552	1709	0
Flt Permitted				0.995	0.976	
Satd. Flow (perm)	3495	0	0	3552	1709	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	52.4			52.9	108.8	
Travel Time (s)	3.8			3.8	7.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	311	52	52	439	26	26
Shared Lane Traffic (%)						
Lane Group Flow (vph)	363	0	0	491	52	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	3.5	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 35.3%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	0	310	452	0	0	0
Future Volume (vph)	0	310	452	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	3570	3570	0	0	1879
Flt Permitted						
Satd. Flow (perm)	0	3570	3570	0	0	1879
Link Speed (k/h)		50	50		50	
Link Distance (m)		52.9	121.5		75.0	
Travel Time (s)		3.8	8.7		5.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	337	491	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	337	491	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		0.0	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25			15	25	15
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 15.8%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	249	61	61	422	0	30	0	30	0	0	0
Future Volume (vph)	0	249	61	61	422	0	30	0	30	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.971						0.932				
Flt Protected					0.994			0.976				
Satd. Flow (prot)	0	3466	0	0	3548	0	0	1709	0	0	1879	0
Flt Permitted					0.994			0.976				
Satd. Flow (perm)	0	3466	0	0	3548	0	0	1709	0	0	1879	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		121.5			415.4			216.7			81.6	
Travel Time (s)		8.7			29.9			15.6			5.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	271	66	66	459	0	33	0	33	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	337	0	0	525	0	0	66	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Yield			Yield			Yield			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 35.8%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	WBL	WBR	SBL	SBR	SEL2	SEL	SET	NWT	NWR	NWR2
Lane Configurations										
Traffic Volume (vph)	246	345	92	2	2	177	100	136	132	311
Future Volume (vph)	246	345	92	2	2	177	100	136	132	311
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.921		0.997						0.850	
Flt Protected	0.980		0.953			0.950				
Satd. Flow (prot)	1696	0	1785	0	0	1785	1879	1879	1597	0
Flt Permitted	0.980		0.953			0.950				
Satd. Flow (perm)	1696	0	1785	0	0	1785	1879	1879	1597	0
Link Speed (k/h)	50		50				50	50		
Link Distance (m)	81.3		277.3				415.4	424.1		
Travel Time (s)	5.9		20.0				29.9	30.5		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	267	375	100	2	2	192	109	148	143	338
Shared Lane Traffic (%)										
Lane Group Flow (vph)	642	0	102	0	0	194	109	148	481	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left	Left	Left	Right	Right
Median Width(m)	3.5		3.5				3.5	0.0		
Link Offset(m)	0.0		0.0				0.0	0.0		
Crosswalk Width(m)	4.8		4.8				4.8	4.8		
Two way Left Turn Lane										
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25	15	25	15	25	25			15	15
Sign Control	Yield		Yield				Yield	Yield		

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 70.4%		ICU Level of Service C	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	217	383	247	191	8	362
Future Volume (vph)	217	383	247	191	8	362
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.868	
Flt Protected			0.950		0.999	
Satd. Flow (prot)	1879	1597	1785	1879	1629	0
Flt Permitted			0.950		0.999	
Satd. Flow (perm)	1879	1597	1785	1879	1629	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	239.7			424.1	129.6	
Travel Time (s)	17.3			30.5	9.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	236	416	268	208	9	393
Shared Lane Traffic (%)						
Lane Group Flow (vph)	236	416	268	208	402	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			3.5	3.5	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Yield			Yield	Yield	

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 58.0%		ICU Level of Service B	
Analysis Period (min) 15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	200	95	101	170	400	230
Future Volume (vph)	200	95	101	170	400	230
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	0.0	0.0			25.0
Storage Lanes	1	1	1			1
Taper Length (m)	7.5		7.5			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1785	1597	1785	1879	1879	1597
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1785	1597	1785	1879	1879	1597
Link Speed (k/h)	50			50	50	
Link Distance (m)	204.4			97.6	129.6	
Travel Time (s)	14.7			7.0	9.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	217	103	110	185	435	250
Shared Lane Traffic (%)						
Lane Group Flow (vph)	217	103	110	185	435	250
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.5			3.5	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25	15	25			15
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 47.7%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	WBR	WBR2	SBL	SBR	SEL
Lane Configurations					
Traffic Volume (vph)	0	331	0	0	295
Future Volume (vph)	0	331	0	0	295
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97
Frt		0.865			
Flt Protected					0.950
Satd. Flow (prot)	0	1625	0	0	3463
Flt Permitted					0.950
Satd. Flow (perm)	0	1625	0	0	3463
Link Speed (k/h)	50		50		50
Link Distance (m)	204.4		71.2		216.7
Travel Time (s)	14.7		5.1		15.6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	360	0	0	321
Shared Lane Traffic (%)					
Lane Group Flow (vph)	0	360	0	0	321
Enter Blocked Intersection	No	No	No	No	No
Lane Alignment	Right	Right	Left	Right	Left
Median Width(m)	0.0		0.0		7.0
Link Offset(m)	0.0		0.0		0.0
Crosswalk Width(m)	4.8		4.8		4.8
Two way Left Turn Lane					
Headway Factor	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	15	15	25	15	25
Sign Control	Yield		Yield		Yield

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 23.8%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	WBR	WBR2	NBR2
Lane Configurations				
Traffic Volume (vph)	1117	1030	600	331
Future Volume (vph)	1117	1030	600	331
Ideal Flow (vphpl)	1900	1900	1900	1900
Storage Length (m)		20.0		
Storage Lanes		1		
Taper Length (m)				
Lane Util. Factor	0.95	0.88	1.00	1.00
Frt		0.850	0.850	0.865
Flt Protected				
Satd. Flow (prot)	3570	2811	1597	1625
Flt Permitted				
Satd. Flow (perm)	3570	2811	1597	1625
Link Speed (k/h)	50			
Link Distance (m)	184.7			
Travel Time (s)	13.3			
Peak Hour Factor	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1214	1120	652	360
Shared Lane Traffic (%)				
Lane Group Flow (vph)	1214	1120	652	360
Enter Blocked Intersection	No	No	No	No
Lane Alignment	Left	Right	Right	Right
Median Width(m)	0.0			
Link Offset(m)	0.0			
Crosswalk Width(m)	4.8			
Two way Left Turn Lane				
Headway Factor	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	15	15
Sign Control	Free			

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 58.0%		ICU Level of Service B	
Analysis Period (min) 15			

Lane Group	EBT	EBR	EBR2	NEL	NER	NER2	SWL2	SWL	SWR
Lane Configurations									
Traffic Volume (vph)	808	200	70	75	121	45	188	50	991
Future Volume (vph)	808	200	70	75	121	45	188	50	991
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.88
Frt		0.850			0.850				0.850
Flt Protected				0.950				0.950	
Satd. Flow (prot)	3570	1597	0	1785	1597	0	0	1785	2811
Flt Permitted				0.950				0.950	
Satd. Flow (perm)	3570	1597	0	1785	1597	0	0	1785	2811
Link Speed (k/h)	50								
Link Distance (m)	110.6								
Travel Time (s)	8.0								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	878	217	76	82	132	49	204	54	1077
Shared Lane Traffic (%)									
Lane Group Flow (vph)	878	293	0	82	181	0	0	258	1077
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Right	Left	Right	Right	Left	Left	Right
Median Width(m)	0.0								
Link Offset(m)	0.0								
Crosswalk Width(m)	4.8								
Two way Left Turn Lane									
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	15	25	15	15	25	25	15
Sign Control	Yield								

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 55.8%		ICU Level of Service B	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	0	199	0	600
Future Volume (vph)	0	0	0	199	0	600
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.88
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	0	0	1879	0	2811
Flt Permitted						
Satd. Flow (perm)	0	0	0	1879	0	2811
Link Speed (k/h)	50			50	50	
Link Distance (m)	118.8			239.7	43.4	
Travel Time (s)	8.6			17.3	3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	216	0	652
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	216	0	652
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	0.0	
Link Offset(m)	0.0			3.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 24.3%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	0	431	0	0
Future Volume (vph)	0	0	0	431	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1879	0	0	1879	0	1879
Flt Permitted						
Satd. Flow (perm)	1879	0	0	1879	0	1879
Link Speed (k/h)	50			50	50	
Link Distance (m)	59.5			61.1	173.5	
Travel Time (s)	4.3			4.4	12.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	468	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	468	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Free			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 26.0%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	0	199	1030	0
Future Volume (vph)	0	0	0	199	1030	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3570	3463	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3570	3463	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	85.0			118.8	103.6	
Travel Time (s)	6.1			8.6	7.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	216	1120	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	216	1120	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Right	Right	Left	Right
Median Width(m)	0.0			0.0	0.0	
Link Offset(m)	0.0			4.0	7.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Stop			Yield	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 41.6%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	1073	20	0	1066	0	5
Future Volume (vph)	1073	20	0	1066	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)		30.0	0.0		0.0	20.0
Storage Lanes		0	0		0	0
Taper Length (m)			7.5		7.5	
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Frt	0.997					0.865
Flt Protected						
Satd. Flow (prot)	3559	0	0	3570	0	1625
Flt Permitted						
Satd. Flow (perm)	3559	0	0	3570	0	1625
Link Speed (k/h)	50			50	50	
Link Distance (m)	172.1			110.6	100.9	
Travel Time (s)	12.4			8.0	7.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1166	22	0	1159	0	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1188	0	0	1159	0	5
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Right	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Free			Free	Yield	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 40.3%		ICU Level of Service A	
Analysis Period (min) 15			

1: Artera 2 & Str. Institutului Performance by approach

Approach	NB	SE	NW	All
Denied Del/Veh (s)	0.0	0.1	0.0	0.0
Total Del/Veh (s)	2.7	3.1	3.4	3.0
Stop Del/Veh (s)	0.1	0.0	0.0	0.1
Stop/Veh	0.06	0.00	0.00	0.02
Avg Speed (kph)	30	30	34	32
HC Emissions (g)	0	0	0	0
CO Emissions (g)	5	4	4	13
NOx Emissions (g)	1	0	0	2

2: Cerntura ocolitoare & Artera 2 Performance by approach

Approach	NW	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	2.7	0.6	0.4	1.0
Stop Del/Veh (s)	0.0	0.0	0.0	0.0
Stop/Veh	0.00	0.00	0.00	0.00
Avg Speed (kph)	23	46	46	40
HC Emissions (g)	0	2	2	3
CO Emissions (g)	5	31	36	72
NOx Emissions (g)	0	5	5	10

3: Strada 1 & Str. Institutului Performance by approach

Approach	SE	NW	NE	All
Denied Del/Veh (s)	0.0	0.0	0.5	0.3
Total Del/Veh (s)	7.2	8.4	6.4	6.9
Stop Del/Veh (s)	4.3	5.1	2.1	3.0
Stop/Veh	0.67	0.67	0.19	0.36
Avg Speed (kph)	31	21	33	30
HC Emissions (g)	0	0	5	5
CO Emissions (g)	6	14	228	248
NOx Emissions (g)	1	1	20	23

4: Str. Institutului & Strada 6 Performance by approach

Approach	SE	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.4	0.3	0.3
Stop Del/Veh (s)	0.1	0.1	0.1
Stop/Veh	0.01	0.00	0.01
Avg Speed (kph)	37	43	38
HC Emissions (g)	4	1	4
CO Emissions (g)	269	22	291
NOx Emissions (g)	16	2	18

5: Strada 2 & Str. Institutului Performance by approach

Approach	SE	NW	NE	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Total Del/Veh (s)	0.2	0.1	13.1	1.9
Stop Del/Veh (s)	0.0	0.0	11.3	1.5
Stop/Veh	0.00	0.00	1.00	0.13
Avg Speed (kph)	46	47	15	32
HC Emissions (g)	1	0	0	1
CO Emissions (g)	23	6	19	48
NOx Emissions (g)	2	1	1	5

6: Str. Institutului & Strada 5 Performance by approach

Approach	SE	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.2	0.5	0.3
Stop Del/Veh (s)	0.1	0.2	0.1
Stop/Veh	0.00	0.00	0.00
Avg Speed (kph)	42	36	38
HC Emissions (g)	1	3	4
CO Emissions (g)	54	172	226
NOx Emissions (g)	4	10	15

7: Strada 3/Strada 4 & Str. Institutului Performance by approach

Approach	SE	NW	NE	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Total Del/Veh (s)	3.7	5.0	6.7	4.5
Stop Del/Veh (s)	0.0	0.3	3.3	0.6
Stop/Veh	0.01	0.05	0.42	0.08
Avg Speed (kph)	33	38	32	35
HC Emissions (g)	1	3	1	6
CO Emissions (g)	57	181	39	277
NOx Emissions (g)	7	14	3	24

8: Str. Institutului & Calea Fanarului & Stada acces cartier Performance by approach

Approach	WB	SB	SE	NW	All
Denied Del/Veh (s)	0.0	0.4	0.0	0.0	0.1
Total Del/Veh (s)	6.9	19.9	103.2	4.7	46.4
Stop Del/Veh (s)	4.0	16.4	103.9	1.0	44.7
Stop/Veh	0.59	0.77	0.90	0.22	0.67
Avg Speed (kph)	17	22	10	38	14
HC Emissions (g)	0	1	5	4	10
CO Emissions (g)	15	58	387	199	660
NOx Emissions (g)	2	5	27	16	49

9: DN73 & Str. Fanarului/Str. Institutului Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	14.3	21.0	3.2	16.1
Stop Del/Veh (s)	9.9	14.1	0.5	10.7
Stop/Veh	0.63	0.86	0.00	0.66
Avg Speed (kph)	22	27	29	26
HC Emissions (g)	5	9	1	15
CO Emissions (g)	324	435	48	806
NOx Emissions (g)	24	41	5	70

10: DN73 & Artera nod rutier Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0	0.0
Total Del/Veh (s)	19.7	3.7	12.2	12.0
Stop Del/Veh (s)	18.8	2.4	8.4	8.8
Stop/Veh	0.64	0.33	0.44	0.45
Avg Speed (kph)	18	29	19	19
HC Emissions (g)	1	0	4	5
CO Emissions (g)	61	11	216	289
NOx Emissions (g)	3	1	29	33

11: Artera nod rutier & Legatura giratie Performance by approach

Approach	WB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	91.8	2.8	72.4
Stop Del/Veh (s)	93.2	0.1	72.9
Stop/Veh	0.89	0.04	0.70
Avg Speed (kph)	5	34	7
HC Emissions (g)	1	1	2
CO Emissions (g)	116	71	188
NOx Emissions (g)	10	5	15

12: Legatura giratie & DN1 - Cal Fagarasului & Legatura nod rutier & Legatura Performance by app

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	2.1	4.8	54.3	9.0
Stop Del/Veh (s)	0.3	0.0	56.4	5.9
Stop/Veh	0.04	0.01	1.00	0.12
Avg Speed (kph)	36	26	4	23
HC Emissions (g)	11	1	0	12
CO Emissions (g)	640	62	31	733
NOx Emissions (g)	48	7	3	58

13: Acces centru cxomercial Hornbach & Artera nod rutier & DN1 & DN1 - Cal Fagarasului Perform

Approach	EB	NE	SW	All
Denied Del/Veh (s)	0.0	2.7	0.0	0.1
Total Del/Veh (s)	4.7	5.9	6.3	5.6
Stop Del/Veh (s)	0.5	3.2	3.4	2.2
Stop/Veh	0.09	0.62	0.41	0.29
Avg Speed (kph)	30	22	18	23
HC Emissions (g)	2	0	2	4
CO Emissions (g)	90	7	81	178
NOx Emissions (g)	11	1	13	25

14: Legatura & Str. Fanarului Performance by approach

Approach	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.9	0.4	1.0
Stop Del/Veh (s)	1.0	0.0	0.2
Stop/Veh	0.24	0.00	0.05
Avg Speed (kph)	38	17	27
HC Emissions (g)	2	0	2
CO Emissions (g)	104	17	122
NOx Emissions (g)	7	3	10

21: Artera 3 & Artera 2 Performance by approach

Approach	NW	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.0	3.0
Stop Del/Veh (s)	0.0	0.0
Stop/Veh	0.00	0.00
Avg Speed (kph)	20	20
HC Emissions (g)	0	0
CO Emissions (g)	17	17
NOx Emissions (g)	2	2

28: Legatura nod rutier & DN1 - Cal Fagarasului/Str. Fanarului Performance by approach

Approach	WB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	119.1	1.3	17.7
Stop Del/Veh (s)	113.6	0.1	16.0
Stop/Veh	1.08	0.04	0.19
Avg Speed (kph)	3	24	12
HC Emissions (g)	0	4	4
CO Emissions (g)	22	213	236
NOx Emissions (g)	1	25	26

29: Acces centru cxomercial Arabesc & DN1/DN1 Performance by approach

Approach	EB	WB	NE	All
Denied Del/Veh (s)	0.5	0.0	0.1	0.2
Total Del/Veh (s)	1.5	1.0	5.1	1.2
Stop Del/Veh (s)	0.0	0.4	5.4	0.2
Stop/Veh	0.00	0.01	1.00	0.01
Avg Speed (kph)	43	34	20	38
HC Emissions (g)	3	10	0	13
CO Emissions (g)	150	604	1	755
NOx Emissions (g)	15	44	0	59

Total Network Performance

Denied Del/Veh (s)	0.6
Total Del/Veh (s)	34.3
Stop Del/Veh (s)	24.8
Stop/Veh	0.69
Avg Speed (kph)	30
HC Emissions (g)	179
CO Emissions (g)	8635
NOx Emissions (g)	777

Intersection: 1: Artera 2 & Str. Institutului

Movement	NB
Directions Served	LR
Maximum Queue (m)	8.8
Average Queue (m)	1.8
95th Queue (m)	7.5
Link Distance (m)	66.5
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Cerntura ocolitoare & Artera 2

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 3: Strada 1 & Str. Institutului

Movement	SE	NW	NW	NE
Directions Served	UTR	<L	T	<L
Maximum Queue (m)	22.0	25.2	14.8	63.7
Average Queue (m)	12.5	21.2	8.3	26.3
95th Queue (m)	24.9	27.0	16.1	58.2
Link Distance (m)	176.4	82.8	82.8	212.8
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: Str. Institutului & Strada 6

Movement	
Directions Served	
Maximum Queue (m)	
Average Queue (m)	
95th Queue (m)	
Link Distance (m)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Strada 2 & Str. Institutului

Movement	NE
Directions Served	LR
Maximum Queue (m)	22.1
Average Queue (m)	15.5
95th Queue (m)	24.8
Link Distance (m)	97.0
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 6: Str. Institutului & Strada 5

Movement	
Directions Served	
Maximum Queue (m)	
Average Queue (m)	
95th Queue (m)	
Link Distance (m)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Strada 3/Strada 4 & Str. Institutului

Movement	SE	NW	NE
Directions Served	T	LT	LTR
Maximum Queue (m)	9.1	9.2	21.7
Average Queue (m)	1.8	1.8	10.2
95th Queue (m)	7.9	8.0	21.6
Link Distance (m)	89.6	362.6	192.2
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: Str. Institutului & Calea Fanarului & Stada acces cartier

Movement	WB	SB	SE	SE	NW	NW
Directions Served	ULR>	LR	<L	T	T	R>
Maximum Queue (m)	35.9	34.6	299.1	123.5	9.2	13.4
Average Queue (m)	25.2	27.3	201.2	57.7	3.7	9.4
95th Queue (m)	41.0	39.1	367.9	128.9	11.1	17.6
Link Distance (m)	43.1	247.6	362.6	362.6	369.1	369.1
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 9: DN73 & Str. Fanarului/Str. Institutului

Movement	EB	EB	WB	WB
Directions Served	T	R	L	T
Maximum Queue (m)	41.2	28.1	82.9	22.0
Average Queue (m)	27.0	21.4	46.2	12.3
95th Queue (m)	45.0	31.8	89.0	20.6
Link Distance (m)	202.6	202.6	369.1	369.1
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 10: DN73 & Artera nod rutier

Movement	EB	NB	SB	SB
Directions Served	L	L	T	R
Maximum Queue (m)	44.1	22.1	107.2	32.5
Average Queue (m)	20.8	11.7	30.3	23.6
95th Queue (m)	40.1	20.3	99.7	35.6
Link Distance (m)	169.8	91.1	92.6	
Upstream Blk Time (%)			13	
Queuing Penalty (veh)			164	
Storage Bay Dist (m)				25.0
Storage Blk Time (%)				22
Queuing Penalty (veh)				164

Intersection: 11: Artera nod rutier & Legatura giratie

Movement	WB
Directions Served	>
Maximum Queue (m)	186.0
Average Queue (m)	132.8
95th Queue (m)	216.8
Link Distance (m)	169.8
Upstream Blk Time (%)	20
Queuing Penalty (veh)	133
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 12: Legatura giratie & DN1 - Cal Fagarasului & Legatura nod rutier & Legatura

Movement	NB
Directions Served	>
Maximum Queue (m)	42.1
Average Queue (m)	40.8
95th Queue (m)	42.0
Link Distance (m)	27.6
Upstream Blk Time (%)	90
Queuing Penalty (veh)	594
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 13: Acces centru cxomercial Hornbach & Artera nod rutier & DN1 & DN1 - Cal Fagaras

Movement	EB	EB	EB	NE	NE	SW	SW	SW
Directions Served	T	T	R>	L	R>	<L	R	R
Maximum Queue (m)	22.1	15.6	8.1	9.2	15.7	34.6	30.2	22.9
Average Queue (m)	10.8	3.1	1.6	7.2	9.0	22.9	20.0	7.8
95th Queue (m)	25.9	13.4	6.9	13.2	17.5	35.0	29.4	23.9
Link Distance (m)	80.5	80.5	80.5	75.5		42.4	42.4	42.4
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)					20.0			
Storage Blk Time (%)					0			
Queuing Penalty (veh)					0			

Intersection: 14: Legatura & Str. Fanarului

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 21: Artera 3 & Artera 2

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 28: Legatura nod rutier & DN1 - Cal Fagarasului/Str. Fanarului

Movement	WB	WB	NW	NW
Directions Served	T	T	L	L
Maximum Queue (m)	56.2	60.2	23.1	21.2
Average Queue (m)	42.2	43.8	4.6	8.7
95th Queue (m)	61.4	70.6	19.9	20.1
Link Distance (m)	91.7	91.7	77.7	77.7
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 29: Acces centru cxomercial Arabesc & DN1/DN1

Movement	NE
Directions Served	R
Maximum Queue (m)	3.2
Average Queue (m)	0.6
95th Queue (m)	2.8
Link Distance (m)	75.3
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 1055

Lane Group	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Volume (vph)	0	109	35	0	0	52
Future Volume (vph)	0	109	35	0	0	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected						
Satd. Flow (prot)	1625	0	1879	0	0	1879
Flt Permitted						
Satd. Flow (perm)	1625	0	1879	0	0	1879
Link Speed (k/h)	50		50			50
Link Distance (m)	91.6		78.6			107.2
Travel Time (s)	6.6		5.7			7.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	150%	150%	150%	150%	150%	150%
Adj. Flow (vph)	0	178	57	0	0	85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	178	0	57	0	0	85
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.5		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25	15		15	25	
Sign Control	Yield		Yield			Yield

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 20.9%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	535	0	784	0	0	784	109
Future Volume (vph)	0	0	0	0	0	535	0	784	0	0	784	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	0.0		75.0	0.0		75.0
Storage Lanes	0		1	0		1	0		1	0		1
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt						0.865						0.850
Flt Protected												
Satd. Flow (prot)	0	0	1879	0	0	1625	0	3570	1879	0	3570	1597
Flt Permitted												
Satd. Flow (perm)	0	0	1879	0	0	1625	0	3570	1879	0	3570	1597
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		61.1			65.9			113.1			97.2	
Travel Time (s)		4.4			4.7			8.1			7.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	150%	150%	150%	150%	150%	150%	150%	150%	150%	150%	150%	150%
Adj. Flow (vph)	0	0	0	0	0	872	0	1278	0	0	1278	178
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	0	872	0	1278	0	0	1278	178
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Free			Free			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 88.9%		ICU Level of Service E	
Analysis Period (min) 15			

Lane Group	EBL	EBR	SET	SER	NWL2	NWL	NWT	NEL2	NEL	NER
Lane Configurations										
Traffic Volume (vph)	0	0	62	82	82	136	52	399	0	399
Future Volume (vph)	0	0	62	82	82	136	52	399	0	399
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.97	0.95
Frt			0.923						0.925	
Flt Protected						0.950			0.976	
Satd. Flow (prot)	1879	1879	1734	0	0	1785	1879	0	3291	0
Flt Permitted						0.950			0.976	
Satd. Flow (perm)	1879	1879	1734	0	0	1785	1879	0	3291	0
Link Speed (k/h)	50		50				50		50	
Link Distance (m)	73.2		214.4				120.6		242.2	
Travel Time (s)	5.3		15.4				8.7		17.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	150%	150%	150%	150%	150%	150%	150%	150%	150%	150%
Adj. Flow (vph)	0	0	101	134	134	222	85	651	0	651
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	235	0	0	356	85	0	1302	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left	Left	Left	Left	Right
Median Width(m)	3.5		0.0				3.5		10.0	
Link Offset(m)	0.0		0.0				0.0		0.0	
Crosswalk Width(m)	4.8		4.8				4.8		4.8	
Two way Left Turn Lane										
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25	15		15	25	25		25	25	15
Sign Control	Yield		Yield				Yield		Yield	

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 76.5%		ICU Level of Service D	
Analysis Period (min) 15			

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	0	461	270	0	0	0
Future Volume (vph)	0	461	270	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	3570	3570	0	0	1879
Flt Permitted						
Satd. Flow (perm)	0	3570	3570	0	0	1879
Link Speed (k/h)		50	50		50	
Link Distance (m)		120.6	52.4		75.7	
Travel Time (s)		8.7	3.8		5.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	150%	150%	150%	150%	150%	150%
Adj. Flow (vph)	0	752	440	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	752	440	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		0.0	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25			15	25	15
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 22.4%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	449	12	12	210	60	60
Future Volume (vph)	449	12	12	210	60	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.996				0.932	
Flt Protected				0.997	0.976	
Satd. Flow (prot)	3556	0	0	3559	1709	0
Flt Permitted				0.997	0.976	
Satd. Flow (perm)	3556	0	0	3559	1709	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	52.4			52.9	108.8	
Travel Time (s)	3.8			3.8	7.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	150%	150%	150%	150%	150%	150%
Adj. Flow (vph)	732	20	20	342	98	98
Shared Lane Traffic (%)						
Lane Group Flow (vph)	752	0	0	362	196	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	3.5	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 39.3%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	0	509	222	0	0	0
Future Volume (vph)	0	509	222	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	3570	3570	0	0	1879
Flt Permitted						
Satd. Flow (perm)	0	3570	3570	0	0	1879
Link Speed (k/h)		50	50		50	
Link Distance (m)		52.9	121.5		75.0	
Travel Time (s)		3.8	8.7		5.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	150%	150%	150%	150%	150%	150%
Adj. Flow (vph)	0	830	362	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	830	362	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		0.0	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25			15	25	15
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 24.4%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	494	15	15	146	0	76	0	76	0	0	0
Future Volume (vph)	0	494	15	15	146	0	76	0	76	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.996						0.932				
Flt Protected					0.995			0.976				
Satd. Flow (prot)	0	3556	0	0	3552	0	0	1709	0	0	1879	0
Flt Permitted					0.995			0.976				
Satd. Flow (perm)	0	3556	0	0	3552	0	0	1709	0	0	1879	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		121.5			415.4			216.7			81.6	
Travel Time (s)		8.7			29.9			15.6			5.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	150%	150%	150%	150%	150%	150%	150%	150%	150%	150%	150%	150%
Adj. Flow (vph)	0	805	24	24	238	0	124	0	124	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	829	0	0	262	0	0	248	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Yield			Yield			Yield			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 43.5%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	WBL	WBR	WBR2	SBL	SBR	SEL2	SEL	SET	NWT	NWR	NWR2
Lane Configurations											
Traffic Volume (vph)	240	109	8	194	1	2	423	145	51	48	171
Future Volume (vph)	240	109	8	194	1	2	423	145	51	48	171
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt	0.956			0.999						0.850	
Flt Protected	0.968			0.953			0.950	0.976			
Satd. Flow (prot)	1739	0	0	1789	0	0	1696	1742	1879	1597	0
Flt Permitted	0.968			0.953			0.950	0.976			
Satd. Flow (perm)	1739	0	0	1789	0	0	1696	1742	1879	1597	0
Link Speed (k/h)	50			50				50	50		
Link Distance (m)	81.3			277.3				415.4	424.1		
Travel Time (s)	5.9			20.0				29.9	30.5		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	150%	150%	150%	150%	150%	150%	150%	150%	150%	150%	150%
Adj. Flow (vph)	391	178	13	316	2	3	690	236	83	78	279
Shared Lane Traffic (%)							34%				
Lane Group Flow (vph)	582	0	0	318	0	0	458	471	83	357	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Right	Left	Right	Left	Left	Left	Left	Right	Right
Median Width(m)	3.5			3.5				3.5	0.0		
Link Offset(m)	0.0			0.0				0.0	0.0		
Crosswalk Width(m)	4.8			4.8				4.8	4.8		
Two way Left Turn Lane											
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25	15	15	25	15	25	25			15	15
Sign Control	Yield			Yield				Yield	Yield		

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 86.9%		ICU Level of Service E	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	94	430	422	157	3	176
Future Volume (vph)	94	430	422	157	3	176
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.867	
Flt Protected			0.950		0.999	
Satd. Flow (prot)	1879	1597	1785	1879	1627	0
Flt Permitted			0.950		0.999	
Satd. Flow (perm)	1879	1597	1785	1879	1627	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	239.7			424.1	129.6	
Travel Time (s)	17.3			30.5	9.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	150%	150%	150%	150%	150%	150%
Adj. Flow (vph)	153	701	688	256	5	287
Shared Lane Traffic (%)						
Lane Group Flow (vph)	153	701	688	256	292	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			3.5	3.5	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Yield			Yield	Yield	

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 81.7%		ICU Level of Service D	
Analysis Period (min) 15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	100	20	90	79	500	352
Future Volume (vph)	100	20	90	79	500	352
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	0.0	0.0			25.0
Storage Lanes	1	1	1			1
Taper Length (m)	7.5		7.5			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1785	1597	1785	1879	1879	1597
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1785	1597	1785	1879	1879	1597
Link Speed (k/h)	50			50	50	
Link Distance (m)	204.4			97.6	129.6	
Travel Time (s)	14.7			7.0	9.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	150%	150%	150%	150%	150%	150%
Adj. Flow (vph)	163	33	147	129	815	574
Shared Lane Traffic (%)						
Lane Group Flow (vph)	163	33	147	129	815	574
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.5			3.5	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25	15	25			15
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 65.3%		ICU Level of Service C	
Analysis Period (min) 15			

Lane Group	WBR	WBR2	SBL	SBR	SEL
Lane Configurations					
Traffic Volume (vph)	0	442	0	0	120
Future Volume (vph)	0	442	0	0	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97
Frt		0.865			
Flt Protected					0.950
Satd. Flow (prot)	0	1625	0	0	3463
Flt Permitted					0.950
Satd. Flow (perm)	0	1625	0	0	3463
Link Speed (k/h)	50		50		50
Link Distance (m)	204.4		71.2		216.3
Travel Time (s)	14.7		5.1		15.6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92
Growth Factor	150%	150%	150%	150%	150%
Adj. Flow (vph)	0	721	0	0	196
Shared Lane Traffic (%)					
Lane Group Flow (vph)	0	721	0	0	196
Enter Blocked Intersection	No	No	No	No	No
Lane Alignment	Right	Right	Left	Right	Left
Median Width(m)	0.0		0.0		7.0
Link Offset(m)	0.0		0.0		0.0
Crosswalk Width(m)	4.8		4.8		4.8
Two way Left Turn Lane					
Headway Factor	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	15	15	25	15	25
Sign Control	Yield		Yield		Yield

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 44.4%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	WBR	WBR2	NBR2
Lane Configurations				
Traffic Volume (vph)	891	981	524	442
Future Volume (vph)	891	981	524	442
Ideal Flow (vphpl)	1900	1900	1900	1900
Storage Length (m)		20.0		
Storage Lanes		1		
Taper Length (m)				
Lane Util. Factor	0.95	0.88	1.00	1.00
Frt		0.850	0.850	0.865
Flt Protected				
Satd. Flow (prot)	3570	2811	1597	1625
Flt Permitted				
Satd. Flow (perm)	3570	2811	1597	1625
Link Speed (k/h)	50			
Link Distance (m)	182.0			
Travel Time (s)	13.1			
Peak Hour Factor	0.92	0.92	0.92	0.92
Growth Factor	150%	150%	150%	150%
Adj. Flow (vph)	1453	1599	854	721
Shared Lane Traffic (%)				
Lane Group Flow (vph)	1453	1599	854	721
Enter Blocked Intersection	No	No	No	No
Lane Alignment	Left	Right	Right	Right
Median Width(m)	0.0			
Link Offset(m)	0.0			
Crosswalk Width(m)	4.8			
Two way Left Turn Lane				
Headway Factor	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	15	15
Sign Control	Free			

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 84.7%		ICU Level of Service E	
Analysis Period (min) 15			

Lane Group	EBT	EBR	EBR2	NEL	NER	NER2	SWL2	SWL	SWR
Lane Configurations									
Traffic Volume (vph)	723	100	26	25	32	10	136	10	995
Future Volume (vph)	723	100	26	25	32	10	136	10	995
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)		0.0		0.0	20.0			0.0	0.0
Storage Lanes		1		1	1			1	2
Taper Length (m)				7.5				7.5	
Lane Util. Factor	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.88
Frt		0.850			0.850				0.850
Flt Protected				0.950				0.950	
Satd. Flow (prot)	3570	1597	0	1785	1597	0	0	1785	2811
Flt Permitted				0.950				0.950	
Satd. Flow (perm)	3570	1597	0	1785	1597	0	0	1785	2811
Link Speed (k/h)	50								
Link Distance (m)	114.1								
Travel Time (s)	8.2								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	150%	150%	150%	150%	150%	150%	150%	150%	150%
Adj. Flow (vph)	1179	163	42	41	52	16	222	16	1622
Shared Lane Traffic (%)									
Lane Group Flow (vph)	1179	205	0	41	68	0	0	238	1622
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Right	Left	Right	Right	Left	Left	Right
Median Width(m)	0.0								
Link Offset(m)	0.0								
Crosswalk Width(m)	4.8								
Two way Left Turn Lane									
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	15	25	15	15	25	25	15
Sign Control	Yield								

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 62.2%		ICU Level of Service B	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	0	160	0	524
Future Volume (vph)	0	0	0	160	0	524
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.88
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	0	0	1879	0	2811
Flt Permitted						
Satd. Flow (perm)	0	0	0	1879	0	2811
Link Speed (k/h)	50			50	50	
Link Distance (m)	118.8			239.7	43.4	
Travel Time (s)	8.6			17.3	3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	150%	150%	150%	150%	150%	150%
Adj. Flow (vph)	0	0	0	261	0	854
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	261	0	854
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	0.0	
Link Offset(m)	0.0			3.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 30.8%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	0	109	0	0
Future Volume (vph)	0	0	0	109	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1879	0	0	1879	0	1879
Flt Permitted						
Satd. Flow (perm)	1879	0	0	1879	0	1879
Link Speed (k/h)	50			50	50	
Link Distance (m)	59.5			61.1	173.5	
Travel Time (s)	4.3			4.4	12.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	150%	150%	150%	150%	150%	150%
Adj. Flow (vph)	0	0	0	178	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	178	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Free			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 11.9%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	0	160	981	0
Future Volume (vph)	0	0	0	160	981	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3570	3463	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3570	3463	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	80.7			118.8	103.6	
Travel Time (s)	5.8			8.6	7.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	150%	150%	150%	150%	150%	150%
Adj. Flow (vph)	0	0	0	261	1599	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	261	1599	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Right	Right
Median Width(m)	0.0			0.0	0.0	
Link Offset(m)	0.0			4.0	7.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Stop			Yield	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 55.3%		ICU Level of Service B	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	844	20	0	1020	0	5
Future Volume (vph)	844	20	0	1020	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)		0.0	0.0		0.0	20.0
Storage Lanes		0	0		0	0
Taper Length (m)			7.5		7.5	
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Frt	0.996					0.865
Flt Protected						
Satd. Flow (prot)	3556	0	0	3570	0	1625
Flt Permitted						
Satd. Flow (perm)	3556	0	0	3570	0	1625
Link Speed (k/h)	50			50	50	
Link Distance (m)	169.5			114.1	100.9	
Travel Time (s)	12.2			8.2	7.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	150%	150%	150%	150%	150%	150%
Adj. Flow (vph)	1376	33	0	1663	0	8
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1409	0	0	1663	0	8
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Right	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Free			Free	Yield	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 45.9%		ICU Level of Service A	
Analysis Period (min) 15			

1: Artera 2 & Str. Institutului Performance by approach

Approach	NB	SE	NW	All
Denied Del/Veh (s)	0.0	0.2	0.0	0.0
Total Del/Veh (s)	3.6	3.2	3.2	3.5
Stop Del/Veh (s)	0.1	0.0	0.0	0.1
Stop/Veh	0.06	0.00	0.00	0.05
Avg Speed (kph)	28	29	34	29
HC Emissions (g)	1	0	0	1
CO Emissions (g)	33	7	5	46
NOx Emissions (g)	5	1	1	7

2: Cerntura ocolitoare & Artera 2 Performance by approach

Approach	NW	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	1.4	0.6	1.4	1.1
Stop Del/Veh (s)	0.0	0.0	0.0	0.0
Stop/Veh	0.00	0.00	0.00	0.00
Avg Speed (kph)	27	46	37	40
HC Emissions (g)	0	2	2	4
CO Emissions (g)	1	34	75	110
NOx Emissions (g)	0	6	6	12

3: Strada 1 & Str. Institutului Performance by approach

Approach	SE	NW	NE	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Total Del/Veh (s)	38.2	6.0	2.9	20.2
Stop Del/Veh (s)	35.8	2.4	0.1	17.3
Stop/Veh	0.95	0.46	0.03	0.59
Avg Speed (kph)	12	25	39	18
HC Emissions (g)	0	0	2	2
CO Emissions (g)	43	17	75	135
NOx Emissions (g)	2	2	7	11

4: Str. Institutului & Strada 6 Performance by approach

Approach	SE	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.0	0.2	0.6
Stop Del/Veh (s)	0.4	0.1	0.2
Stop/Veh	0.00	0.00	0.00
Avg Speed (kph)	35	45	38
HC Emissions (g)	3	0	3
CO Emissions (g)	187	14	201
NOx Emissions (g)	12	2	13

5: Strada 2 & Str. Institutului Performance by approach

Approach	SE	NW	NE	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Total Del/Veh (s)	0.2	0.2	8.8	0.8
Stop Del/Veh (s)	0.0	0.1	7.4	0.6
Stop/Veh	0.00	0.01	0.92	0.07
Avg Speed (kph)	45	47	18	39
HC Emissions (g)	0	0	0	1
CO Emissions (g)	11	6	4	21
NOx Emissions (g)	1	1	0	3

6: Str. Institutului & Strada 5 Performance by approach

Approach	SE	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.2	0.3	0.2
Stop Del/Veh (s)	0.0	0.0	0.0
Stop/Veh	0.00	0.00	0.00
Avg Speed (kph)	45	36	38
HC Emissions (g)	1	3	3
CO Emissions (g)	21	205	226
NOx Emissions (g)	2	12	14

7: Strada 3/Strada 4 & Str. Institutului Performance by approach

Approach	SE	NW	NE	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Total Del/Veh (s)	3.4	5.4	3.3	4.4
Stop Del/Veh (s)	0.1	0.5	0.2	0.3
Stop/Veh	0.03	0.06	0.08	0.05
Avg Speed (kph)	33	38	39	37
HC Emissions (g)	1	5	0	6
CO Emissions (g)	29	277	11	317
NOx Emissions (g)	4	23	1	28

8: Str. Institutului & Str. Fanarului & Stada acces cartier Performance by approach

Approach	WB	SB	SE	NW	All
Denied Del/Veh (s)	0.0	0.2	0.0	0.0	0.0
Total Del/Veh (s)	26.9	7.1	6.0	5.6	13.4
Stop Del/Veh (s)	29.3	4.1	2.8	0.9	11.6
Stop/Veh	0.41	0.58	0.45	0.18	0.34
Avg Speed (kph)	7	34	36	37	27
HC Emissions (g)	0	0	3	7	11
CO Emissions (g)	30	16	168	405	619
NOx Emissions (g)	2	2	12	31	46

9: DN73 & Str. Fanarului/Str. Institutului Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	4.4	6.5	3.4	4.8
Stop Del/Veh (s)	0.9	1.2	0.4	0.8
Stop/Veh	0.22	0.20	0.00	0.15
Avg Speed (kph)	32	36	29	34
HC Emissions (g)	6	7	2	14
CO Emissions (g)	330	360	83	773
NOx Emissions (g)	24	31	10	65

10: DN73 & Artera nod rutier Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.0	0.0
Total Del/Veh (s)	31.0	2.2	2.4	9.9
Stop Del/Veh (s)	29.4	0.8	0.4	8.2
Stop/Veh	0.65	0.18	0.12	0.28
Avg Speed (kph)	15	35	31	22
HC Emissions (g)	2	1	3	6
CO Emissions (g)	164	39	196	400
NOx Emissions (g)	9	3	17	29

11: Artera nod rutier & Legatura giratie Performance by approach

Approach	WB	SE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	41.9	4.4	24.6
Stop Del/Veh (s)	39.0	0.5	21.2
Stop/Veh	0.87	0.07	0.50
Avg Speed (kph)	10	32	16
HC Emissions (g)	2	3	5
CO Emissions (g)	137	200	337
NOx Emissions (g)	12	16	28

12: Legatura giratie & DN1 - Cal Fagarasului & Legatura nod rutier & Legatura Performance by app

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	2.7	13.9	51.4	13.1
Stop Del/Veh (s)	0.5	5.0	52.2	7.7
Stop/Veh	0.05	0.34	0.94	0.28
Avg Speed (kph)	35	16	4	20
HC Emissions (g)	12	3	0	15
CO Emissions (g)	659	183	26	868
NOx Emissions (g)	57	20	3	80

13: Acces centru cxomercial Hornbach & Artera nod rutier & DN1 & DN1 - Cal Fagarasului Perform

Approach	EB	NE	SW	All
Denied Del/Veh (s)	0.0	0.2	0.0	0.0
Total Del/Veh (s)	6.4	26.2	5.3	8.1
Stop Del/Veh (s)	1.9	23.3	2.6	4.6
Stop/Veh	0.33	0.79	0.41	0.42
Avg Speed (kph)	25	8	20	19
HC Emissions (g)	2	1	2	4
CO Emissions (g)	81	30	100	211
NOx Emissions (g)	10	3	15	28

14: Legatura & Str. Fanarului Performance by approach

Approach	WB	NE	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.6	0.3	0.4
Stop Del/Veh (s)	0.1	0.0	0.0
Stop/Veh	0.00	0.00	0.00
Avg Speed (kph)	42	17	31
HC Emissions (g)	2	0	3
CO Emissions (g)	131	17	148
NOx Emissions (g)	8	3	11

21: Artera 3 & Artera 2 Performance by approach

Approach	NW	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	3.0	3.0
Stop Del/Veh (s)	0.0	0.0
Stop/Veh	0.00	0.00
Avg Speed (kph)	20	20
HC Emissions (g)	2	2
CO Emissions (g)	133	133
NOx Emissions (g)	12	12

28: Legatura nod rutier & DN1 - Cal Fagarasului/Str. Fanarului Performance by approach

Approach	WB	NW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	45.2	1.6	9.1
Stop Del/Veh (s)	41.3	0.0	7.1
Stop/Veh	0.72	0.02	0.14
Avg Speed (kph)	7	24	16
HC Emissions (g)	0	3	3
CO Emissions (g)	22	158	179
NOx Emissions (g)	1	19	20

29: Acces centru cxomercial Arabesc & DN1/DN1 Performance by approach

Approach	EB	WB	NE	All
Denied Del/Veh (s)	0.6	0.0	0.1	0.3
Total Del/Veh (s)	2.0	1.0	2.1	1.5
Stop Del/Veh (s)	0.0	0.3	1.6	0.2
Stop/Veh	0.01	0.00	0.25	0.01
Avg Speed (kph)	42	34	24	38
HC Emissions (g)	5	9	0	14
CO Emissions (g)	219	585	1	804
NOx Emissions (g)	21	40	0	61

Total Network Performance

Denied Del/Veh (s)	10.5
Total Del/Veh (s)	44.9
Stop Del/Veh (s)	28.0
Stop/Veh	0.90
Avg Speed (kph)	27
HC Emissions (g)	183
CO Emissions (g)	9524
NOx Emissions (g)	808

Intersection: 1: Artera 2 & Str. Institutului

Movement	NB
Directions Served	LR
Maximum Queue (m)	16.3
Average Queue (m)	9.5
95th Queue (m)	22.3
Link Distance (m)	66.5
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Cerntura ocolitoare & Artera 2

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 3: Strada 1 & Str. Institutului

Movement	SE	NW	NW	NE
Directions Served	UTR	<L	T	<L
Maximum Queue (m)	106.8	29.7	9.2	8.3
Average Queue (m)	90.0	20.4	5.4	3.3
95th Queue (m)	108.5	31.3	12.8	10.0
Link Distance (m)	176.4	82.8	82.8	212.8
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: Str. Institutului & Strada 6

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 5: Strada 2 & Str. Institutului

Movement	NW	NE
Directions Served	LT	LR
Maximum Queue (m)	8.6	9.3
Average Queue (m)	1.7	9.0
95th Queue (m)	7.4	9.4
Link Distance (m)	38.2	97.0
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Str. Institutului & Strada 5

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 7: Strada 3/Strada 4 & Str. Institutului

Movement	SE	NW	NE
Directions Served	T	LT	LTR
Maximum Queue (m)	9.2	9.2	9.1
Average Queue (m)	1.8	1.8	1.8
95th Queue (m)	7.9	7.9	7.8
Link Distance (m)	84.4	357.4	187.2
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: Str. Institutului & Str. Fanarului & Stada acces cartier

Movement	WB	B84	SB	SE	SE	NW	NW
Directions Served	ULR	T	LR	<L	T	T	R>
Maximum Queue (m)	65.1	211.9	22.6	16.6	16.2	9.3	35.3
Average Queue (m)	64.0	88.8	11.2	13.1	11.9	3.7	16.7
95th Queue (m)	67.6	220.7	23.6	18.8	17.6	11.2	32.7
Link Distance (m)	43.1	191.3	247.6	357.4	357.4	369.1	369.1
Upstream Blk Time (%)	76	11					
Queuing Penalty (veh)	0	0					
Storage Bay Dist (m)							
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 9: DN73 & Str. Fanarului/Str. Institutului

Movement	EB	EB	WB	WB
Directions Served	T	R	L	T
Maximum Queue (m)	16.0	10.3	15.7	9.0
Average Queue (m)	13.7	4.1	6.5	8.7
95th Queue (m)	17.9	12.3	16.4	9.1
Link Distance (m)	202.6	202.6	369.1	369.1
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 10: DN73 & Artera nod rutier

Movement	EB	NB	SB
Directions Served	L	L	R
Maximum Queue (m)	73.1	16.6	23.2
Average Queue (m)	43.5	13.2	10.5
95th Queue (m)	81.7	18.6	25.6
Link Distance (m)	169.8	91.1	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			25.0
Storage Blk Time (%)			0
Queuing Penalty (veh)			2

Intersection: 11: Artera nod rutier & Legatura giratie

Movement	WB	SE
Directions Served	>	<L
Maximum Queue (m)	109.9	9.2
Average Queue (m)	57.9	1.8
95th Queue (m)	123.7	7.9
Link Distance (m)	169.8	162.3
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 12: Legatura giratie & DN1 - Cal Fagarasului & Legatura nod rutier & Legatura

Movement	WB	WB	WB	B89	B89	B88	B88	B87	B87	B86	B86	NB
Directions Served	R	R	>	T	T	T	T	T	T	T	T	>
Maximum Queue (m)	106.6	124.2	27.4	82.9	82.8	80.8	82.3	96.3	96.7	177.5	177.5	42.0
Average Queue (m)	41.4	124.2	5.5	77.5	82.7	55.8	71.9	80.4	94.2	106.4	113.7	41.2
95th Queue (m)	125.0	124.3	23.5	94.4	82.8	99.2	106.1	110.2	102.3	249.7	242.7	42.4
Link Distance (m)	103.0	103.0		61.4	61.4	60.8	60.8	74.6	74.6	172.9	172.9	27.6
Upstream Blk Time (%)	0	31		18	57	6	65	17	51	19	41	78
Queuing Penalty (veh)	0	0		0	0	0	0	0	0	0	0	386
Storage Bay Dist (m)			20.0									
Storage Blk Time (%)		1	0									
Queuing Penalty (veh)		11	0									

Intersection: 13: Acces centru cxomercial Hornbach & Artera nod rutier & DN1 & DN1 - Cal Fagaras

Movement	EB	EB	EB	NE	NE	SW	SW
Directions Served	T	T	R>	L	R>	<L	R
Maximum Queue (m)	32.8	22.3	22.3	41.5	22.4	31.3	23.0
Average Queue (m)	19.1	16.7	15.6	28.7	15.0	24.4	16.8
95th Queue (m)	32.2	23.8	24.7	43.4	22.7	33.1	22.0
Link Distance (m)	77.0	77.0	77.0	75.5	75.5	46.8	46.8
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (m)							
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 14: Legatura & Str. Fanarului

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 21: Artera 3 & Artera 2

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 28: Legatura nod rutier & DN1 - Cal Fagarasului/Str. Fanarului

Movement	WB	WB	NW
Directions Served	T	T	L
Maximum Queue (m)	34.6	21.4	8.5
Average Queue (m)	26.5	14.0	1.7
95th Queue (m)	38.7	21.4	7.3
Link Distance (m)	91.7	91.7	77.7
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 29: Acces centru cxomercial Arabesc & DN1/DN1

Movement	NE
Directions Served	R
Maximum Queue (m)	6.2
Average Queue (m)	1.7
95th Queue (m)	5.7
Link Distance (m)	78.9
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 399

Lane Group	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Volume (vph)	0	431	67	0	0	52
Future Volume (vph)	0	431	67	0	0	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected						
Satd. Flow (prot)	1625	0	1879	0	0	1879
Flt Permitted						
Satd. Flow (perm)	1625	0	1879	0	0	1879
Link Speed (k/h)	50		50			50
Link Distance (m)	91.6		78.6			107.2
Travel Time (s)	6.6		5.7			7.7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	150%	150%	150%	150%	150%	150%
Adj. Flow (vph)	0	703	109	0	0	85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	703	0	109	0	0	85
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.5		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25	15		15	25	
Sign Control	Yield		Yield			Yield

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 52.0%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	212	0	784	0	0	497	431
Future Volume (vph)	0	0	0	0	0	212	0	784	0	0	497	431
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	0.0		75.0	0.0		75.0
Storage Lanes	0		1	0		1	0		1	0		1
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt						0.865						0.850
Flt Protected												
Satd. Flow (prot)	0	0	1879	0	0	1625	0	3570	1879	0	3570	1597
Flt Permitted												
Satd. Flow (perm)	0	0	1879	0	0	1625	0	3570	1879	0	3570	1597
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		61.1			65.9			113.1			97.2	
Travel Time (s)		4.4			4.7			8.1			7.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	150%	150%	150%	150%	150%	150%	150%	150%	150%	150%	150%	150%
Adj. Flow (vph)	0	0	0	0	0	346	0	1278	0	0	810	703
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	0	346	0	1278	0	0	810	703
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Free			Free			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 58.9%		ICU Level of Service B	
Analysis Period (min) 15			

Lane Group	EBL	EBR	SET	SER	NWL2	NWL	NWT	NEL2	NEL	NER
Lane Configurations										
Traffic Volume (vph)	0	0	176	322	322	54	52	158	0	158
Future Volume (vph)	0	0	176	322	322	54	52	158	0	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.97	0.95
Frt			0.913						0.925	
Flt Protected						0.950			0.976	
Satd. Flow (prot)	1879	1879	1715	0	0	1785	1879	0	3291	0
Flt Permitted						0.950			0.976	
Satd. Flow (perm)	1879	1879	1715	0	0	1785	1879	0	3291	0
Link Speed (k/h)	50		50				50		50	
Link Distance (m)	73.2		214.4				120.6		242.2	
Travel Time (s)	5.3		15.4				8.7		17.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	150%	150%	150%	150%	150%	150%	150%	150%	150%	150%
Adj. Flow (vph)	0	0	287	525	525	88	85	258	0	258
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	812	0	0	613	85	0	516	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left	Left	Left	Left	Right
Median Width(m)	3.5		0.0				3.5		10.0	
Link Offset(m)	0.0		0.0				0.0		0.0	
Crosswalk Width(m)	4.8		4.8				4.8		4.8	
Two way Left Turn Lane										
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25	15		15	25	25		25	25	15
Sign Control	Yield		Yield				Yield		Yield	

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 99.0%		ICU Level of Service F	
Analysis Period (min) 15			

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	0	334	428	0	0	0
Future Volume (vph)	0	334	428	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	3570	3570	0	0	1879
Flt Permitted						
Satd. Flow (perm)	0	3570	3570	0	0	1879
Link Speed (k/h)		50	50		50	
Link Distance (m)		120.6	52.4		75.7	
Travel Time (s)		8.7	3.8		5.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	150%	150%	150%	150%	150%	150%
Adj. Flow (vph)	0	545	698	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	545	698	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		0.0	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25			15	25	15
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 21.1%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	286	48	48	404	24	24
Future Volume (vph)	286	48	48	404	24	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt	0.978				0.932	
Flt Protected				0.995	0.976	
Satd. Flow (prot)	3491	0	0	3552	1709	0
Flt Permitted				0.995	0.976	
Satd. Flow (perm)	3491	0	0	3552	1709	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	52.4			52.9	108.8	
Travel Time (s)	3.8			3.8	7.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	150%	150%	150%	150%	150%	150%
Adj. Flow (vph)	466	78	78	659	39	39
Shared Lane Traffic (%)						
Lane Group Flow (vph)	544	0	0	737	78	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	3.5	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 47.2%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	0	310	452	0	0	0
Future Volume (vph)	0	310	452	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	0	3570	3570	0	0	1879
Flt Permitted						
Satd. Flow (perm)	0	3570	3570	0	0	1879
Link Speed (k/h)		50	50		50	
Link Distance (m)		52.9	121.5		75.0	
Travel Time (s)		3.8	8.7		5.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	150%	150%	150%	150%	150%	150%
Adj. Flow (vph)	0	505	737	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	505	737	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		0.0	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25			15	25	15
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 22.1%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	249	61	61	422	0	30	0	30	0	0	0
Future Volume (vph)	0	249	61	61	422	0	30	0	30	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.971						0.932				
Flt Protected					0.994			0.976				
Satd. Flow (prot)	0	3466	0	0	3548	0	0	1709	0	0	1879	0
Flt Permitted					0.994			0.976				
Satd. Flow (perm)	0	3466	0	0	3548	0	0	1709	0	0	1879	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		121.5			415.4			216.7			81.6	
Travel Time (s)		8.7			29.9			15.6			5.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	150%	150%	150%	150%	150%	150%	150%	150%	150%	150%	150%	150%
Adj. Flow (vph)	0	406	99	99	688	0	49	0	49	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	505	0	0	787	0	0	98	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control		Yield			Yield			Yield			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 48.7%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	WBL	WBR	SBL	SBR	SEL2	SEL	SET	NWT	NWR	NWR2
Lane Configurations										
Traffic Volume (vph)	246	345	92	2	2	177	100	136	132	311
Future Volume (vph)	246	345	92	2	2	177	100	136	132	311
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.921		0.997						0.850	
Flt Protected	0.980		0.953			0.950				
Satd. Flow (prot)	1696	0	1785	0	0	1785	1879	1879	1597	0
Flt Permitted	0.980		0.953			0.950				
Satd. Flow (perm)	1696	0	1785	0	0	1785	1879	1879	1597	0
Link Speed (k/h)	50		50				50	50		
Link Distance (m)	81.3		277.3				415.4	424.1		
Travel Time (s)	5.9		20.0				29.9	30.5		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	150%	150%	150%	150%	150%	150%	150%	150%	150%	150%
Adj. Flow (vph)	401	563	150	3	3	289	163	222	215	507
Shared Lane Traffic (%)										
Lane Group Flow (vph)	964	0	153	0	0	292	163	222	722	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left	Left	Left	Right	Right
Median Width(m)	3.5		3.5				3.5	0.0		
Link Offset(m)	0.0		0.0				0.0	0.0		
Crosswalk Width(m)	4.8		4.8				4.8	4.8		
Two way Left Turn Lane										
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25	15	25	15	25	25			15	15
Sign Control	Yield		Yield				Yield	Yield		

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 99.0%		ICU Level of Service F	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	217	383	247	191	8	362
Future Volume (vph)	217	383	247	191	8	362
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.868	
Flt Protected			0.950		0.999	
Satd. Flow (prot)	1879	1597	1785	1879	1629	0
Flt Permitted			0.950		0.999	
Satd. Flow (perm)	1879	1597	1785	1879	1629	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	239.7			424.1	129.6	
Travel Time (s)	17.3			30.5	9.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	150%	150%	150%	150%	150%	150%
Adj. Flow (vph)	354	624	403	311	13	590
Shared Lane Traffic (%)						
Lane Group Flow (vph)	354	624	403	311	603	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			3.5	3.5	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Yield			Yield	Yield	

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 81.9%		ICU Level of Service D	
Analysis Period (min) 15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	200	95	101	170	400	230
Future Volume (vph)	200	95	101	170	400	230
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	0.0	0.0			25.0
Storage Lanes	1	1	1			1
Taper Length (m)	7.5		7.5			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1785	1597	1785	1879	1879	1597
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1785	1597	1785	1879	1879	1597
Link Speed (k/h)	50			50	50	
Link Distance (m)	204.4			97.6	129.6	
Travel Time (s)	14.7			7.0	9.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	150%	150%	150%	150%	150%	150%
Adj. Flow (vph)	326	155	165	277	652	375
Shared Lane Traffic (%)						
Lane Group Flow (vph)	326	155	165	277	652	375
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.5			3.5	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	25	15	25			15
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 66.6%		ICU Level of Service C	
Analysis Period (min) 15			

Lane Group	WBR	WBR2	SBL	SBR	SEL
Lane Configurations					
Traffic Volume (vph)	0	331	0	0	295
Future Volume (vph)	0	331	0	0	295
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.97
Frt		0.865			
Flt Protected					0.950
Satd. Flow (prot)	0	1625	0	0	3463
Flt Permitted					0.950
Satd. Flow (perm)	0	1625	0	0	3463
Link Speed (k/h)	50		50		50
Link Distance (m)	204.4		71.2		216.7
Travel Time (s)	14.7		5.1		15.6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92
Growth Factor	150%	150%	150%	150%	150%
Adj. Flow (vph)	0	540	0	0	481
Shared Lane Traffic (%)					
Lane Group Flow (vph)	0	540	0	0	481
Enter Blocked Intersection	No	No	No	No	No
Lane Alignment	Right	Right	Left	Right	Left
Median Width(m)	0.0		0.0		7.0
Link Offset(m)	0.0		0.0		0.0
Crosswalk Width(m)	4.8		4.8		4.8
Two way Left Turn Lane					
Headway Factor	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	15	15	25	15	25
Sign Control	Yield		Yield		Yield

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 34.1%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	WBR	WBR2	NBR2
Lane Configurations				
Traffic Volume (vph)	1117	1030	600	331
Future Volume (vph)	1117	1030	600	331
Ideal Flow (vphpl)	1900	1900	1900	1900
Storage Length (m)		20.0		
Storage Lanes		1		
Taper Length (m)				
Lane Util. Factor	0.95	0.88	1.00	1.00
Frt		0.850	0.850	0.865
Flt Protected				
Satd. Flow (prot)	3570	2811	1597	1625
Flt Permitted				
Satd. Flow (perm)	3570	2811	1597	1625
Link Speed (k/h)	50			
Link Distance (m)	184.7			
Travel Time (s)	13.3			
Peak Hour Factor	0.92	0.92	0.92	0.92
Growth Factor	150%	150%	150%	150%
Adj. Flow (vph)	1821	1679	978	540
Shared Lane Traffic (%)				
Lane Group Flow (vph)	1821	1679	978	540
Enter Blocked Intersection	No	No	No	No
Lane Alignment	Left	Right	Right	Right
Median Width(m)	0.0			
Link Offset(m)	0.0			
Crosswalk Width(m)	4.8			
Two way Left Turn Lane				
Headway Factor	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	15	15
Sign Control	Free			

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 83.7%		ICU Level of Service E	
Analysis Period (min) 15			

Lane Group	EBT	EBR	EBR2	NEL	NER	NER2	SWL2	SWL	SWR
Lane Configurations									
Traffic Volume (vph)	808	200	70	75	121	45	188	50	991
Future Volume (vph)	808	200	70	75	121	45	188	50	991
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.88
Frt		0.850			0.850				0.850
Flt Protected				0.950				0.950	
Satd. Flow (prot)	3570	1597	0	1785	1597	0	0	1785	2811
Flt Permitted				0.950				0.950	
Satd. Flow (perm)	3570	1597	0	1785	1597	0	0	1785	2811
Link Speed (k/h)	50								
Link Distance (m)	110.6								
Travel Time (s)	8.0								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	150%	150%	150%	150%	150%	150%	150%	150%	150%
Adj. Flow (vph)	1317	326	114	122	197	73	307	82	1616
Shared Lane Traffic (%)									
Lane Group Flow (vph)	1317	440	0	122	270	0	0	389	1616
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Right	Left	Right	Right	Left	Left	Right
Median Width(m)	0.0								
Link Offset(m)	0.0								
Crosswalk Width(m)	4.8								
Two way Left Turn Lane									
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	15	25	15	15	25	25	15
Sign Control	Yield								

Intersection Summary			
Area Type:	Other		
Control Type: Roundabout			
Intersection Capacity Utilization 78.7%		ICU Level of Service D	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	0	199	0	600
Future Volume (vph)	0	0	0	199	0	600
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.88
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	0	0	1879	0	2811
Flt Permitted						
Satd. Flow (perm)	0	0	0	1879	0	2811
Link Speed (k/h)	50			50	50	
Link Distance (m)	118.8			239.7	43.4	
Travel Time (s)	8.6			17.3	3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	150%	150%	150%	150%	150%	150%
Adj. Flow (vph)	0	0	0	324	0	978
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	324	0	978
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	0.0	
Link Offset(m)	0.0			3.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 34.8%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	0	431	0	0
Future Volume (vph)	0	0	0	431	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1879	0	0	1879	0	1879
Flt Permitted						
Satd. Flow (perm)	1879	0	0	1879	0	1879
Link Speed (k/h)	50			50	50	
Link Distance (m)	59.5			61.1	173.5	
Travel Time (s)	4.3			4.4	12.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	150%	150%	150%	150%	150%	150%
Adj. Flow (vph)	0	0	0	703	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	703	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Free			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.4%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	0	0	0	199	1030	0
Future Volume (vph)	0	0	0	199	1030	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.97	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	3570	3463	0
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	3570	3463	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	85.0			118.8	103.6	
Travel Time (s)	6.1			8.6	7.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	150%	150%	150%	150%	150%	150%
Adj. Flow (vph)	0	0	0	324	1679	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	324	1679	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Right	Right	Left	Right
Median Width(m)	0.0			0.0	0.0	
Link Offset(m)	0.0			4.0	7.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Stop			Yield	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 59.0%		ICU Level of Service B	
Analysis Period (min) 15			

Lane Group	EBT	EBR	WBL	WBT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	1073	20	0	1066	0	5
Future Volume (vph)	1073	20	0	1066	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)		30.0	0.0		0.0	20.0
Storage Lanes		0	0		0	0
Taper Length (m)			7.5		7.5	
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Frt	0.997					0.865
Flt Protected						
Satd. Flow (prot)	3559	0	0	3570	0	1625
Flt Permitted						
Satd. Flow (perm)	3559	0	0	3570	0	1625
Link Speed (k/h)	50			50	50	
Link Distance (m)	172.1			110.6	100.9	
Travel Time (s)	12.4			8.0	7.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	150%	150%	150%	150%	150%	150%
Adj. Flow (vph)	1749	33	0	1738	0	8
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1782	0	0	1738	0	8
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Right	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	4.8			4.8	4.8	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		15	25		25	15
Sign Control	Free			Free	Yield	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 55.4%		ICU Level of Service B	
Analysis Period (min) 15			

ANEXA A

Beneficiar: Municipiul Brasov
Localitatea: Brasov
Data: 21.07.2020

POST 3 - str. Institutului
POST 2 - str. Egretei
POST 1 - str. Institutului

Pozitia km: intersectie str. Institutului - str. Egretei
Postul nr.: 1

RECENSAMANT DE CIRCULATIE

Sensul de circulatie: 1->2

Interval orar		Biciclete/ Motociclete	Autoturisme	Microbuze cu max. 8+1 locuri	Autocamionete si autospeciale cu MTMA<=3.5	Autocamioane si derivate cu 2 axe	Autocamioane si derivate cu 3 sau 4 axe	Vehicule articulate (tip TIR) si remorchere cu trailer cu 3 sau 4 axe	Autobuze si autocare	Tractoare cu / fara remorca si vehicule speciale	Autocamioane cu 2, 3 sau 4 axe cu remorca (Tren rutier)	Vehicule cu tractiune animala
7:00	7:15	1	6	0	2	0	0	0	1	0	0	0
7:15	7:30	0	6	0	1	0	0	0	1	0	0	0
7:30	7:45	1	12	1	1	0	0	0	2	0	0	0
7:45	8:00	0	5	0	1	0	0	0	1	1	0	0
veh./ora		2	29	1	5	0	0	0	5	1	0	0
8:00	8:15	0	10	1	0	0	0	0	2	0	0	0
8:15	8:30	0	9	0	1	0	0	0	1	0	0	0
8:30	8:45	0	2	0	0	0	0	0	1	0	0	0
8:45	9:00	0	9	1	0	0	0	0	2	0	0	0
veh./ora		0	30	2	1	0	0	0	6	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		1	30	2	4	0	0	0	19	2	0	0
Debit mediu orar AM		56										
15:00	15:15	0	27	0	0	0	0	0	0	0	0	0
15:15	15:30	0	18	1	1	0	0	0	1	0	0	0
15:30	15:45	0	27	1	2	0	0	0	2	0	0	0
15:45	16:00	1	33	1	2	0	0	0	1	0	0	0
veh./ora		1	105	3	5	0	0	0	4	0	0	0
16:00	16:15	0	33	2	1	0	0	0	1	0	0	0
16:15	16:30	0	31	0	0	1	0	0	1	0	0	0
16:30	16:45	0	34	2	1	0	0	0	1	0	0	0
16:45	17:00	1	45	0	3	0	0	0	1	0	0	0
veh./ora		1	143	4	5	1	0	0	4	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		1	124	4	6	2	0	0	14	0	0	0
Debit mediu orar PM		150										

Sensul de circulatie: 1->3

Interval orar		Biciclete/ Motociclete	Autoturisme	Microbuze cu max. 8+1 locuri	Autocamionete si autospeciale cu MTMA<=3.5	Autocamioane si derivate cu 2 axe	Autocamioane si derivate cu 3 sau 4 axe	Vehicule articulate (tip TIR) si remorchere cu trailer cu 3 sau 4 axe	Autobuze si autocare	Tractoare cu / fara remorca si vehicule speciale	Autocamioane cu 2, 3 sau 4 axe cu remorca (Tren rutier)	Vehicule cu tractiune animala
7:00	7:15	0	6	1	0	0	0	0	0	0	0	0
7:15	7:30	0	9	0	0	0	0	0	2	0	0	0
7:30	7:45	0	9	1	0	0	0	0	0	0	0	0
7:45	8:00	0	12	1	0	0	0	0	1	0	0	0
veh./ora		0	36	3	0	0	0	0	3	0	0	0
8:00	8:15	0	8	0	0	0	0	0	0	0	0	0
8:15	8:30	0	13	0	0	0	0	1	1	0	0	0
8:30	8:45	0	12	0	1	0	0	0	0	0	0	0
8:45	9:00	0	9	0	0	0	0	0	0	0	0	0
veh./ora		0	42	0	1	0	0	1	1	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		0	39	2	1	0	0	2	7	0	0	0
Debit mediu orar AM		50										
15:00	15:15	0	7	0	0	0	0	0	0	0	0	0
15:15	15:30	0	4	0	0	0	0	0	0	0	0	0
15:30	15:45	0	7	0	1	0	0	0	2	0	0	0
15:45	16:00	0	5	1	0	0	0	0	0	0	0	0
veh./ora		0	23	1	1	0	0	0	2	0	0	0
16:00	16:15	0	4	0	0	0	0	0	0	0	0	0
16:15	16:30	0	9	1	0	0	0	0	0	0	0	0
16:30	16:45	0	4	0	1	0	0	0	1	0	0	0
16:45	17:00	0	8	0	0	0	0	0	0	0	0	0
veh./ora		0	25	1	1	0	0	0	1	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		0	24	1	1	0	0	0	5	0	0	0
Debit mediu orar PM		32										

Beneficiar: Municipiul Brasov
Localitatea: Brasov
Data: 21.07.2020

POST 3 - str. Institutului
POST 2 - str. Egretei
POST 1 - str. Institutului

Pozitia km: intersectie str. Institutului - str. Egretei
Postul nr.: 2

RECENSAMANT DE CIRCULATIE

Sensul de circulatie: 2->1

Interval orar		Biciclete/ Motociclete	Autoturisme	Microbuze cu max. 8+1 locuri	Autocamionete si autospeciale cu MTMA<=3.5	Autocamioane si derivate cu 2 axe	Autocamioane si derivate cu 3 sau 4 axe	Vehicule articulate (tip TIR) si remorchere cu trailer cu 3 sau 4 axe	Autobuze si autocare	Tractoare cu / fara remorca si vehicule speciale	Autocamioane cu 2, 3 sau 4 axe cu remorca (Tren rutier)	Vehicule cu tractiune animala
7:00	7:15	0	24	0	3	0	1	0	2	0	0	0
7:15	7:30	0	24	1	2	0	0	0	1	0	0	0
7:30	7:45	0	37	2	2	0	0	0	3	0	0	0
7:45	8:00	0	58	1	4	0	0	0	2	0	0	0
veh./ora		0	143	4	11	0	1	0	8	0	0	0
8:00	8:15	0	41	1	3	0	0	0	1	0	0	0
8:15	8:30	0	43	0	2	0	0	0	3	0	0	0
8:30	8:45	1	48	0	2	0	0	0	1	0	0	0
8:45	9:00	0	29	1	1	0	0	0	1	0	0	0
veh./ora		1	161	2	8	0	0	0	6	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		0	152	4	11	0	2	0	25	0	0	0
Debit mediu orar AM		194										
15:00	15:15	1	0	2	1	0	0	0	1	0	0	0
15:15	15:30	0	14	0	1	0	0	0	1	0	0	0
15:30	15:45	0	12	1	0	0	1	0	1	0	0	0
15:45	16:00	0	14	1	0	0	0	0	1	0	0	0
veh./ora		1	40	4	2	0	1	0	4	0	0	0
16:00	16:15	0	23	1	0	0	0	0	1	0	0	0
16:15	16:30	0	21	1	3	1	0	0	1	0	0	0
16:30	16:45	1	26	3	1	0	0	0	1	0	0	0
16:45	17:00	0	20	0	0	0	0	0	1	0	0	0
veh./ora		1	90	5	4	1	0	0	4	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		1	65	5	4	2	2	0	14	0	0	0
Debit mediu orar PM		92										

Sensul de circulatie: 2->3

Interval orar		Biciclete/ Motociclete	Autoturisme	Microbuze cu max. 8+1 locuri	Autocamionete si autospeciale cu MTMA<=3.5	Autocamioane si derivate cu 2 axe	Autocamioane si derivate cu 3 sau 4 axe	Vehicule articulate (tip TIR) si remorchere cu trailer cu 3 sau 4 axe	Autobuze si autocare	Tractoare cu / fara remorca si vehicule speciale	Autocamioane cu 2, 3 sau 4 axe cu remorca (Tren rutier)	Vehicule cu tractiune animala
7:00	7:15	0	1	0	0	0	0	0	0	0	0	0
7:15	7:30	0	2	0	0	0	0	0	0	0	0	0
7:30	7:45	0	2	0	0	0	0	0	0	0	0	0
7:45	8:00	0	2	0	0	0	0	0	0	0	0	0
veh./ora		0	1	0	0	0	0	0	0	0	0	0
8:00	8:15	0	1	0	0	0	0	0	0	0	0	0
8:15	8:30	0	0	0	0	0	0	0	0	0	0	0
8:30	8:45	0	0	0	0	0	0	0	0	0	0	0
8:45	9:00	0	0	0	0	0	0	0	0	0	0	0
veh./ora		0	1	0	0	0	0	0	0	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		0	1	0	0	0	0	0	0	0	0	0
Debit mediu orar AM		1										
15:00	15:15	0	1	0	0	0	0	0	0	0	0	0
15:15	15:30	0	0	0	0	0	0	0	0	0	0	0
15:30	15:45	3	0	0	0	0	0	0	0	0	0	0
15:45	16:00	0	0	0	0	0	0	0	0	0	0	0
veh./ora		3	1	0	0	0	0	0	0	0	0	0
16:00	16:15	0	1	0	0	0	0	0	0	0	0	0
16:15	16:30	0	0	0	0	0	0	0	0	0	0	0
16:30	16:45	1	0	0	0	0	0	0	0	0	0	0
16:45	17:00	1	0	0	0	0	0	0	0	0	0	0
veh./ora		2	1	0	0	0	0	0	0	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		1	1	0	0	0	0	0	0	0	0	0
Debit mediu orar PM		2										

Beneficiar: Municipiul Brasov
Localitatea: Brasov
Data: 21.07.2020

POST 3 - str. Institutului
POST 2 - str. Egretei
POST 1 - str. Institutului

Pozitia km: intersectie str. Institutului - str. Egretei
Postul nr.: 3

RECENSAMANT DE CIRCULATIE

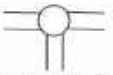
Sensul de circulatie: 3->1

Interval orar		Biciclete/ Motociclete	Autoturisme	Microbuze cu max. 8+1 locuri	Autocamioane si autospeciale cu MTMA<=3.5	Autocamioane si derivate cu 2 axe	Autocamioane si derivate cu 3 sau 4 axe	Vehicule articulate (tip TIR) si remorchere cu trailer cu 3 sau 4 axe	Autobuze si autocare	Tractoare cu / fara remorca si vehicule speciale	Autocamioane cu 2, 3 sau 4 axe cu remorca (Tren rutier)	Vehicule cu tractiune animala
7:00	7:15	0	1	0	0	0	0	0	0	0	0	0
7:15	7:30	0	2	0	0	0	0	0	1	0	0	0
7:30	7:45	0	8	1	0	0	0	0	0	0	0	0
7:45	8:00	0	6	1	0	0	0	0	0	0	0	0
veh./ora		0	17	2	0	0	0	0	1	0	0	0
8:00	8:15	0	7	1	0	0	0	0	0	0	0	0
8:15	8:30	0	7	0	2	0	0	0	2	0	0	0
8:30	8:45	0	4	0	0	0	0	0	0	0	0	0
8:45	9:00	0	3	0	0	0	0	0	1	0	0	0
veh./ora		0	21	1	2	0	0	0	3	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		0	19	2	1	0	0	0	7	0	0	0
Debit mediu orar AM		29										
15:00	15:15	0	12	0	0	0	0	0	1	0	0	0
15:15	15:30	0	21	0	1	0	0	0	0	0	0	0
15:30	15:45	0	12	0	0	0	0	0	0	0	0	0
15:45	16:00	0	16	0	1	0	0	0	0	0	0	0
veh./ora		0	61	0	2	0	0	0	1	0	0	0
16:00	16:15	0	11	1	1	0	0	0	1	0	0	0
16:15	16:30	0	14	0	0	0	0	0	0	0	0	0
16:30	16:45	0	8	0	0	0	0	0	1	0	0	0
16:45	17:00	0	20	2	0	0	0	0	0	0	0	0
veh./ora		0	53	3	1	0	0	0	2	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		0	57	2	2	0	0	0	5	0	0	0
Debit mediu orar PM		66										

Sensul de circulatie: 3->2

Interval orar		Biciclete/ Motociclete	Autoturisme	Microbuze cu max. 8+1 locuri	Autocamioane si autospeciale cu MTMA<=3.5	Autocamioane si derivate cu 2 axe	Autocamioane si derivate cu 3 sau 4 axe	Vehicule articulate (tip TIR) si remorchere cu trailer cu 3 sau 4 axe	Autobuze si autocare	Tractoare cu / fara remorca si vehicule speciale	Autocamioane cu 2, 3 sau 4 axe cu remorca (Tren rutier)	Vehicule cu tractiune animala
7:00	7:15	0	0	0	0	0	0	0	0	0	0	0
7:15	7:30	0	1	0	0	0	0	0	0	0	0	0
7:30	7:45	0	0	0	0	0	0	0	0	0	0	0
7:45	8:00	0	0	0	0	0	0	0	0	0	0	0
veh./ora		0	1	0	0	0	0	0	0	0	0	0
8:00	8:15	0	0	0	0	0	0	0	0	0	0	0
8:15	8:30	0	0	0	0	0	0	0	0	0	0	0
8:30	8:45	0	2	0	0	0	0	0	0	0	0	0
8:45	9:00	0	0	0	0	0	0	0	0	0	0	0
veh./ora		0	2	0	0	0	0	0	0	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		0	2	0	0	0	0	0	0	0	0	0
Debit mediu orar AM		2										
15:00	15:15	0	1	0	0	0	0	0	0	0	0	0
15:15	15:30	0	0	0	0	0	0	0	0	0	0	0
15:30	15:45	0	0	0	0	0	0	0	0	0	0	0
15:45	16:00	0	0	0	0	0	0	0	0	0	0	0
veh./ora		0	1	0	0	0	0	0	0	0	0	0
16:00	16:15	0	1	0	0	0	0	0	0	0	0	0
16:15	16:30	0	0	0	0	0	0	0	0	0	0	0
16:30	16:45	0	2	0	0	0	0	0	0	0	0	0
16:45	17:00	0	0	0	0	0	0	0	0	0	0	0
veh./ora		0	3	0	0	0	0	0	0	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		0	2	0	0	0	0	0	0	0	0	0
Debit mediu orar PM		2										

Schema intersectiei:



Beneficiar: Municipiul Brasov
Localitatea: Brasov
Data: 21.07.2020

Pozitia km: intersectie DN 73 - str. Fanarului
Postul nr.: 1

RECENSAMANT DE CIRCULATIE

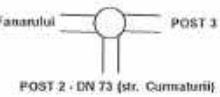
Sensul de circulatie: 1->2

Interval orar		Biciclete/ Motociclete	Autoturisme	Microbuze cu max. 8+1 locuri	Autocamionete si autospeciale cu MTMA<=3.5	Autocamioane si derivate cu 2 axe	Autocamioane si derivate cu 3 sau 4 axe	Vehicule articulate (tip TIR) si remorcheze cu trailer cu 3 sau 4 axe	Autobuze si autocare	Tractoare cu / fara remorca si vehicule speciale	Autocamioane cu 2, 3 sau 4 axe cu remorca (Tren rutier)	Vehicule cu tractiune animala
7:00	7:15	0	68	1	6	0	0	0	3	0	0	0
7:15	7:30	0	71	1	3	0	0	0	2	0	0	0
7:30	7:45	0	105	2	3	0	0	0	4	0	0	0
7:45	8:00	0	96	1	6	0	0	0	1	0	0	0
veh./ora		0	340	5	18	0	0	0	10	0	0	0
8:00	8:15	0	106	7	2	0	1	0	8	0	0	0
8:15	8:30	0	97	4	9	0	0	0	6	0	0	0
8:30	8:45	1	72	2	8	1	0	1	0	0	1	0
8:45	9:00	0	54	1	8	1	0	2	1	0	0	0
veh./ora		1	329	14	27	2	1	3	15	0	1	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		0	335	11	27	4	2	6	44	0	2	0
Debit mediu orar AM		430										
15:00	15:15	2	72	2	4	0	0	0	4	0	0	0
15:15	15:30	0	65	3	5	1	0	0	1	0	0	0
15:30	15:45	0	78	1	5	0	0	1	4	0	0	0
15:45	16:00	1	66	1	2	0	0	1	2	0	0	0
veh./ora		3	281	7	16	1	0	2	11	0	0	0
16:00	16:15	0	88	2	3	0	0	0	3	0	0	0
16:15	16:30	0	86	2	5	0	0	1	3	0	0	0
16:30	16:45	1	73	1	3	0	0	0	3	0	0	0
16:45	17:00	0	100	2	1	0	0	0	0	0	0	0
veh./ora		1	347	7	12	0	0	1	9	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		1	314	8	17	2	0	6	35	0	0	0
Debit mediu orar PM		383										

Sensul de circulatie: 1->3

Interval orar		Biciclete/ Motociclete	Autoturisme	Microbuze cu max. 8+1 locuri	Autocamionete si autospeciale cu MTMA<=3.5	Autocamioane si derivate cu 2 axe	Autocamioane si derivate cu 3 sau 4 axe	Vehicule articulate (tip TIR) si remorcheze cu trailer cu 3 sau 4 axe	Autobuze si autocare	Tractoare cu / fara remorca si vehicule speciale	Autocamioane cu 2, 3 sau 4 axe cu remorca (Tren rutier)	Vehicule cu tractiune animala
7:00	7:15	1	9	0	5	0	1	0	1	0	0	0
7:15	7:30	0	7	0	2	0	0	0	1	0	0	0
7:30	7:45	0	19	1	3	0	0	0	2	0	0	0
7:45	8:00	0	15	0	0	0	0	0	2	1	0	0
veh./ora		1	50	1	10	0	1	0	6	1	0	0
8:00	8:15	0	10	0	4	0	1	0	2	0	0	0
8:15	8:30	0	14	1	2	0	0	0	2	0	0	0
8:30	8:45	0	9	0	2	0	0	0	1	0	0	0
8:45	9:00	0	16	1	2	0	1	0	2	0	0	0
veh./ora		0	49	2	10	0	2	0	7	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		0	50	2	12	0	6	0	23	2	0	0
Debit mediu orar AM		94										
15:00	15:15	0	35	2	2	0	0	0	0	0	0	0
15:15	15:30	0	32	4	2	0	0	1	2	0	0	0
15:30	15:45	1	36	0	4	0	0	0	2	0	0	0
15:45	16:00	1	55	1	3	0	0	0	1	0	0	0
veh./ora		2	158	7	11	0	0	1	5	0	0	0
16:00	16:15	0	47	5	0	0	0	1	1	0	0	0
16:15	16:30	0	48	1	2	1	0	0	1	0	0	0
16:30	16:45	0	34	1	5	0	0	0	2	0	0	0
16:45	17:00	1	54	0	5	0	0	0	1	0	0	0
veh./ora		1	183	7	12	1	0	1	5	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		1	171	8	14	2	0	4	18	0	0	0
Debit mediu orar PM		217										

Schema intersectiei



Beneficiar: Municipiul Brasov
Localitatea: Brasov
Data: 21.07.2020

Pozitia km: Intersectie DN 73 - str. Fanarului
Postul nr.: 2

RECENSAMANT DE CIRCULATIE

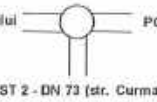
Sensul de circulatie: 2->1

Interval orar		Biciclete/ Motocicleta	Autoturisme	Microbuze cu max. 8+1 locuri	Autocamionete si autospeciale cu MTMA<=3.5	Autocamioane si derivate cu 2 axe	Autocamioane si derivate cu 3 sau 4 axe	Vehicule articulate (tip TIR) si remorchere cu trailer cu 3 sau 4 axe	Autobuze si autocare	Tractoare cu / fara remorca si vehicule speciale	Autocamioane cu 2, 3 sau 4 axe cu remorca (Tren rutier)	Vehicule cu tractiune animala
7:00	7:15	0	1	0	0	0	0	0	0	0	0	0
7:15	7:30	0	0	0	0	0	0	0	0	0	0	0
7:30	7:45	0	0	0	0	0	0	0	0	0	0	0
7:45	8:00	0	0	0	0	0	0	0	0	0	0	0
veh./ora		0	1	0	0	0	0	0	0	0	0	0
8:00	8:15	0	1	0	0	0	0	0	0	0	0	0
8:15	8:30	0	1	0	0	0	0	0	0	0	0	0
8:30	8:45	0	0	0	0	0	0	0	0	0	0	0
8:45	9:00	0	3	0	0	0	0	0	0	0	0	0
veh./ora		0	5	0	0	0	0	0	0	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		0	3	0	0	0	0	0	0	0	0	0
Debit mediu orar AM		3										
15:00	15:15	0	4	0	0	0	0	0	0	0	0	0
15:15	15:30	0	4	0	0	0	0	0	0	0	0	0
15:30	15:45	0	1	0	0	0	0	0	0	0	0	0
15:45	16:00	0	1	0	0	0	0	0	0	0	0	0
veh./ora		0	10	0	0	0	0	0	0	0	0	0
16:00	16:15	0	1	1	0	0	0	0	0	0	0	0
16:15	16:30	1	2	0	0	0	0	0	0	0	0	0
16:30	16:45	0	1	0	0	0	0	0	0	0	0	0
16:45	17:00	0	0	0	1	0	0	0	0	0	0	0
veh./ora		1	4	1	1	0	0	0	0	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		0	7	1	1	0	0	0	0	0	0	0
Debit mediu orar PM		8										

Sensul de circulatie: 2->3

Interval orar		Biciclete/ Motocicleta	Autoturisme	Microbuze cu max. 8+1 locuri	Autocamionete si autospeciale cu MTMA<=3.5	Autocamioane si derivate cu 2 axe	Autocamioane si derivate cu 3 sau 4 axe	Vehicule articulate (tip TIR) si remorchere cu trailer cu 3 sau 4 axe	Autobuze si autocare	Tractoare cu / fara remorca si vehicule speciale	Autocamioane cu 2, 3 sau 4 axe cu remorca (Tren rutier)	Vehicule cu tractiune animala
7:00	7:15	0	31	1	1	0	0	1	1	0	0	0
7:15	7:30	0	38	2	3	0	0	1	2	0	0	0
7:30	7:45	0	34	2	3	0	3	0	0	0	0	0
7:45	8:00	0	31	3	1	0	0	0	0	0	0	0
veh./ora		0	134	8	8	0	3	2	3	0	0	0
8:00	8:15	0	33	4	6	0	0	0	0	0	0	0
8:15	8:30	0	39	0	2	0	1	2	0	0	0	0
8:30	8:45	0	27	0	4	0	1	0	0	0	0	0
8:45	9:00	1	33	0	1	0	0	0	0	0	0	0
veh./ora		1	132	4	13	0	2	2	0	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		0	133	7	13	0	10	8	5	0	0	0
Debit mediu orar AM		176										
15:00	15:15	2	54	2	10	1	0	1	1	0	0	0
15:15	15:30	0	55	0	4	1	0	0	1	0	0	0
15:30	15:45	1	37	2	11	0	1	0	2	0	0	0
15:45	16:00	2	43	2	10	0	0	0	0	0	0	0
veh./ora		5	189	6	35	2	1	1	4	0	0	0
16:00	16:15	0	33	0	2	0	0	0	0	0	0	0
16:15	16:30	0	51	0	1	0	0	0	1	0	0	0
16:30	16:45	0	61	4	0	0	2	0	0	0	0	0
16:45	17:00	0	73	3	4	0	0	0	2	0	0	0
veh./ora		0	218	7	7	0	2	0	3	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		1	204	8	25	4	8	2	12	0	0	0
Debit mediu orar PM		262										

Schema intersectiei



Beneficiar: Municipiul Brasov
Localitatea Brasov
Data: 21.07.2020

Pozitia km: Intersectie DN 73 - str. Fanarului
Postul nr.: 3

RECENSAMANT DE CIRCULATIE

Sensul de circulatie: 3->1

Interval orar		Biciclete/ Motocicilete	Autoturisme	Microbuze cu max. 8+1 locuri	Autocamioneta si autospeciale cu MTMA<=3.5	Autocamioane si derivate cu 2 axe	Autocamioane si derivate cu 3 sau 4 axe	Vehicule articulate (tip TIR) si remorchere cu trailer cu 3 sau 4 axe	Autobuze si autocare	Tractoare cu / fara remorca si vehicule speciale	Autocamioane cu 2, 3 sau 4 axe cu remorca (Tren rutier)	Vehicule cu tractiune animala
7:00	7:15	1	19	0	2	0	0	1	3	0	0	0
7:15	7:30	0	11	0	1	0	1	0	2	0	0	0
7:30	7:45	0	27	1	3	0	0	0	2	0	0	0
7:45	8:00	0	32	0	1	0	2	0	1	0	0	0
veh./ora		1	89	1	7	0	3	1	8	0	0	0
8:00	8:15	0	28	1	3	0	0	0	1	0	0	0
8:15	8:30	1	26	0	4	0	0	0	4	0	0	0
8:30	8:45	1	37	0	1	0	0	0	1	0	0	0
8:45	9:00	0	27	1	3	0	0	1	2	0	0	0
veh./ora		2	118	2	11	0	0	1	8	0	0	0
Coef echivalare: veh fizice - v.e.t		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		1	104	2	11	0	6	4	28	0	0	0
Debit mediu orar AM		155										
15:00	15:15	0	23	2	6	0	0	0	2	0	0	0
15:15	15:30	0	28	0	1	0	0	0	1	0	0	0
15:30	15:45	0	28	0	3	0	0	0	1	0	0	0
15:45	16:00	0	37	0	1	0	1	0	1	0	0	0
veh./ora		0	116	2	11	0	1	0	5	0	0	0
16:00	16:15	0	41	1	2	1	0	0	2	0	0	0
16:15	16:30	0	46	0	2	1	0	0	1	0	0	0
16:30	16:45	0	38	3	3	1	0	0	2	0	0	0
16:45	17:00	0	46	2	3	0	1	1	1	0	0	0
veh./ora		0	171	6	10	3	1	1	6	0	0	0
Coef echivalare: veh fizice - v.e.t		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		0	144	5	13	5	4	2	19	0	0	0
Debit mediu orar AM		191										

Sensul de circulatie: 3->2

Interval orar		Biciclete/ Motocicilete	Autoturisme	Microbuze cu max. 8+1 locuri	Autocamioneta si autospeciale cu MTMA<=3.5	Autocamioane si derivate cu 2 axe	Autocamioane si derivate cu 3 sau 4 axe	Vehicule articulate (tip TIR) si remorchere cu trailer cu 3 sau 4 axe	Autobuze si autocare	Tractoare cu / fara remorca si vehicule speciale	Autocamioane cu 2, 3 sau 4 axe cu remorca (Tren rutier)	Vehicule cu tractiune animala
7:00	7:15	0	35	0	2	0	3	0	1	0	0	0
7:15	7:30	1	39	2	5	0	4	0	0	0	0	0
7:30	7:45	0	56	3	5	1	1	0	2	0	0	0
7:45	8:00	1	89	3	7	0	0	0	2	0	0	0
veh./ora		2	219	8	19	1	8	0	5	0	0	0
8:00	8:15	0	63	4	5	0	1	0	0	0	0	0
8:15	8:30	0	52	3	4	1	1	1	2	0	0	0
8:30	8:45	0	59	1	5	1	1	0	0	0	0	0
8:45	9:00	0	50	1	5	0	1	1	0	0	0	0
veh./ora		0	224	9	19	2	4	2	2	0	0	0
Coef echivalare: veh fizice - v.e.t		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		1	222	10	23	5	24	4	12	0	0	0
Debit mediu orar AM		301										
15:00	15:15	1	24	2	3	0	0	0	0	0	0	0
15:15	15:30	0	45	1	3	1	1	0	0	0	0	0
15:30	15:45	1	27	6	2	0	1	0	1	0	0	0
15:45	16:00	0	41	2	4	0	0	0	0	0	0	0
veh./ora		2	137	11	12	1	2	0	1	0	0	0
16:00	16:15	0	44	2	1	0	0	0	0	0	0	0
16:15	16:30	0	50	1	1	0	0	1	0	0	0	0
16:30	16:45	0	48	4	3	0	0	0	1	0	0	0
16:45	17:00	0	46	0	0	0	1	0	0	0	0	0
veh./ora		0	188	7	5	0	1	1	1	0	0	0
Coef echivalare: veh fizice - v.e.t		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		1	163	11	10	2	6	2	4	0	0	0
Debit mediu orar AM		197										

Beneficiar: Municipiul Brasov
Localitatea: Brasov
Data: 21.07.2020

Punctul km: Intersectie giratorie Hornbach Brasov
Punctul nr: 1

RECENSAMANT DE CIRCULATIE

Sensul de circulatie: 1->4

Interval orar		Biciclete/ Motociclete	Autoturisme	Microbuze cu max. 8+1 locuri	Autocamionete si autospeciale cu MTMA<=3.5	Autocamioane si derivate cu 2 axe	Autocamioane si derivate cu 3 sau 4 axe	Vehicule articulate (tip TIR) si remorchate cu trailer cu 3 sau 4 axe	Autobuze si autocare	Tractoare cu / fara remorca si vehicule speciale	Autocamioane cu 2, 3 sau 4 axe cu remorca (Tren rutier)	Vehicule cu tractiune animala
7:00	7:15	0	8	0	0	0	0	0	0	0	0	0
7:15	7:30	0	6	0	0	0	0	0	0	0	0	0
7:30	7:45	0	2	0	1	0	0	0	0	0	0	0
7:45	8:00	0	9		2	0	0	0	0	0	0	0
veh./ora		0	17	0	3	0	0	0	0	0	0	0
8:00	8:15	0	1	0	0	0	0	0	0	0	0	0
8:15	8:30	0	3	0	0	0	0	0	0	0	0	0
8:30	8:45	0	7	1	1	0	0	0	0	0	0	0
8:45	9:00	0	16	0	2	0	0	0	0	0	0	0
veh./ora		0	27	1	3	0	0	0	0	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		0	22	1	4	0	0	0	0	0	0	0
Debit mediu orar AM		26										
15:00	15:15	0	8	0	0	0	0	0	0	0	0	0
15:15	15:30	0	22	0	1	0	0	0	0	0	0	0
15:30	15:45	0	19	0	1	0	0	0	0	0	0	0
15:45	16:00	0	12	0	5	0	0	0	0	0	0	0
veh./ora		0	57	0	7	0	0	0	0	0	0	0
16:00	16:15	0	12	0	2	1	0	0	0	0	0	0
16:15	16:30	0	15	0	2	0	0	0	0	0	0	0
16:30	16:45	0	21	0	2	0	0	0	0	0	0	0
16:45	17:00	0	11	0	4	0	0	0	0	0	0	0
veh./ora		0	59	0	10	1	0	0	0	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		0	59	0	10	3	0	0	0	0	0	0
Debit mediu orar PM		70										

Beneficiar: Municipiul Brasov
Localitatea: Brasov
Data: 21.07.2020

Punctul km: Intersectie giratorie Hornbach Brasov
Punctul nr: 1

RECENSAMANT DE CIRCULATIE

Sensul de circulatie: 1->5

Interval orar		Biciclete/ Motociclete	Autoturisme	Microbuze cu max. 8+1 locuri	Autocamionete si autospeciale cu MTMA<=3.5	Autocamioane si derivate cu 2 axe	Autocamioane si derivate cu 3 sau 4 axe	Vehicule articulate (tip TIR) si remorchate cu trailer cu 3 sau 4 axe	Autobuze si autocare	Tractoare cu / fara remorca si vehicule speciale	Autocamioane cu 2, 3 sau 4 axe cu remorca (Tren rutier)	Vehicule cu tractiune animala
7:00	7:15	0	103	11	10	0	0	2	4	0	0	0
7:15	7:30	0	123	7	7	1	0	0	3	0	0	0
7:30	7:45	0	132	1	8	0	0	0	5	0	0	0
7:45	8:00	1	147	5	10	1	0	2	4	0	1	0
veh./ora		1	510	24	35	2	0	4	16	0	1	0
8:00	8:15	0	144	2	14	0	0	0	4	0	0	0
8:15	8:30	2	147	7	14	3	0	0	1	0	0	0
8:30	8:45	0	162	3	13	2	1	1	2	0	0	0
8:45	9:00	2	159	7	18	0	0	0	2	0	0	0
veh./ora		4	653	19	59	5	1	1	9	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		1	572	26	66	12	2	10	44	0	2	0
Debit mediu orar AM		723										
15:00	15:15	0	133	13	7	1	2	1	4	0	0	0
15:15	15:30	1	118	10	17	1	2	1	5	0	0	0
15:30	15:45	0	137	0	14	0	0	3	0	0	0	0
15:45	16:00	0	136	2	7	2	1	0	2	0	0	0
veh./ora		1	524	25	45	4	5	5	11	0	0	0
16:00	16:15	1	161	4	19	0	2	2	2	0	0	0
16:15	16:30	1	165	1	6	1	3	1	4	0	0	0
16:30	16:45	0	222	3	8	0	0	1	2	0	0	0
16:45	17:00	2	182	5	8	1	3	1	7	0	0	0
veh./ora		4	730	13	39	2	8	5	15	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		1	607	23	46	11	20	20	46	0	0	0
Debit mediu orar PM		809										

Beneficiar: Municipiul Brasov
Localitatea: Brasov
Data: 21.07.2020

Punctul km: Intersectie giratorie Hornbach Brasov
Punctul nr: 1

RECENSAMANT DE CIRCULATIE

Sensul de circulatie: 1->6

Interval orar		Biciclete/ Motociclete	Autoturisme	Microbuze cu max. 8+1 locuri	Autocamionete si autospeciale cu MTMA<=3.5	Autocamioane si derivate cu 2 axe	Autocamioane si derivate cu 3 sau 4 axe	Vehicule articulate (tip TIR) si remorchate cu trailer cu 3 sau 4 axe	Autobuze si autocare	Tractoare cu / fara remorca si vehicule speciale	Autocamioane cu 2, 3 sau 4 axe cu remorca (Tren rutier)	Vehicule cu tractiune animala
7:00	7:15	0	13	1	2	0	0	1	0	0	0	0
7:15	7:30	0	14	0	2	1	3	0	0	0	0	0
7:30	7:45	0	15	1	3	1	0	0	0	0	1	0
7:45	8:00	0	18	0	4	0	1	0	0	0	0	0
veh./ora		0	60	2	10	2	4	1	0	0	1	0
8:00	8:15	0	13	3	1	0	0	2	0	0	0	0
8:15	8:30	0	19	0	1	0	0	0	0	0	0	0
8:30	8:45	0	19	0	0	3	0	0	0	0	0	0
8:45	9:00	0	17	0	1	0	0	0	0	0	0	0
veh./ora		0	68	3	3	3	0	2	0	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		0	64	3	8	9	8	6	0	0	2	0
Debit mediu orar AM		100										
15:00	15:15	1	34	4	0	1	0	1	0	0	0	0
15:15	15:30	0	18	1	1	0	2	0	1	0	0	0
15:30	15:45	0	31	1	3	0	2	0	0	0	0	0
15:45	16:00	0	20	0	2	0	0	0	0	0	0	0
veh./ora		1	89	6	15	1	4	1	1	0	0	0
16:00	16:15	0	20	0	2	0	0	0	0	0	0	0
16:15	16:30	0	26	0	0	0	0	0	1	0	0	0
16:30	16:45	0	41	2	0	2	2	0	0	0	0	0
16:45	17:00	0	33	0	0	1	0	0	1	0	0	0
veh./ora		0	120	2	2	3	2	0	2	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		0	109	5	10	7	12	2	5	0	0	0
Debit mediu orar PM		150										

Beneficiar: Municipiul Brasov
Localitatea: Brasov
Data: 21.07.2020

Pozitia km: intersectie giratorie Hornbach Brasov
Postul nr.: 2

RECENSAMANT DE CIRCULATIE

Sensul de circulatie: 2->1

Interval orar		Biciclete/ Motociclete	Autoturisme	Microbuze cu max. 8+1 locuri	Autocamionete si autospeciale cu MTMA<=3.5	Autocamioane si derivate cu 2 axe	Autocamioane si derivate cu 3 sau 4 axe	Vehicule articulate (tip TIR) si remorchere cu trailer cu 3 sau 4 axe	Autobuze si autocare	Tractoare cu / fara remorca si vehicule speciale	Autocamioane cu 2, 3 sau 4 axe cu remorca (Tren rutier)	Vehicule cu tractiune animala
7:00	7:15	1	12	0	1	0	0	1	1	0	0	0
7:15	7:30	0	12	0	1	0	1	0	0	0	0	0
7:30	7:45	0	23	1	3	0	0	0	0	0	0	0
7:45	8:00	0	30	0	2	0	2	0	0	0	0	0
veh./ora		1	77	1	7	0	3	1	1	0	0	0
8:00	8:15	0	19	2	1	0	0	0	0	0	0	0
8:15	8:30	0	24	0	3	0	0	0	0	0	0	0
8:30	8:45	1	28	0	2	0	0	0	0	0	0	0
8:45	9:00	0	25	0	3	0	0	1	0	0	0	0
veh./ora		1	96	2	9	0	0	1	0	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		1	87	2	10	0	0	4	2	0	0	0
Debit mediu orar AM		110										
15:00	15:15	0	10	0	3	0	0	0	0	0	0	0
15:15	15:30	0	21	0	1	0	0	0	0	0	0	0
15:30	15:45	0	17	0	1	0	0	0	0	0	0	0
15:45	16:00	0	29	0	0	0	1	0	0	0	0	0
veh./ora		0	77	0	5	0	1	0	0	0	0	0
16:00	16:15	0	25	0	2	0	0	0	0	0	0	0
16:15	16:30	1	33	0	1	0	0	0	0	0	0	0
16:30	16:45	0	34	2	3	0	0	0	0	0	0	0
16:45	17:00	0	32	1	2	0	1	1	0	0	0	0
veh./ora		1	124	3	8	0	1	1	0	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		0	101	2	8	0	4	2	0	0	0	0
Debit mediu orar PM		116										

Beneficiar: Municipiul Brasov
Localitatea: Brasov
Data: 21.07.2020

Pozitia km: intersectie giratorie Hornbach Brasov
Postul nr.: 2

RECENSAMANT DE CIRCULATIE

Sensul de circulatie: 2->7

Interval orar		Biciclete/ Motociclete	Autoturisme	Microbuze cu max. 8+1 locuri	Autocamionete si autospeciale cu MTMA<=3.5	Autocamioane si derivate cu 2 axe	Autocamioane si derivate cu 3 sau 4 axe	Vehicule articulate (tip TIR) si remorchere cu trailer cu 3 sau 4 axe	Autobuze si autocare	Tractoare cu / fara remorca si vehicule speciale	Autocamioane cu 2, 3 sau 4 axe cu remorca (Tren rutier)	Vehicule cu tractiune animala
7:00	7:15	0	8	0	1	0	0	0	2	0	0	0
7:15	7:30	0	0	0	0	0	0	0	2	0	0	0
7:30	7:45	0	4	0	0	0	0	0	2	0	0	0
7:45	8:00	0	2	0	0	0	0	0	1	0	0	0
veh./ora		0	14	0	1	0	0	0	7	0	0	0
8:00	8:15	0	10	0	2	0	0	0	1	0	0	0
8:15	8:30	1	3	0	1	0	0	0	4	0	0	0
8:30	8:45	0	8	0	0	0	0	0	1	0	0	0
8:45	9:00	0	5	1	0	0	0	0	2	0	0	0
veh./ora		1	27	1	3	0	0	0	8	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		0	21	1	2	0	0	0	26	0	0	0
Debit mediu orar AM		50										
15:00	15:15	0	17	2	3	0	0	0	2	0	0	0
15:15	15:30	0	11	0	0	0	0	0	1	0	0	0
15:30	15:45	0	12	0	2	0	0	0	1	0	0	0
15:45	16:00	0	14	0	1	0	0	0	1	0	0	0
veh./ora		0	54	2	6	0	0	0	5	0	0	0
16:00	16:15	0	17	2	0	1	0	0	2	0	0	0
16:15	16:30	0	15	0	1	1	0	0	1	0	0	0
16:30	16:45	0	5	1	0	1	0	0	2	0	0	0
16:45	17:00	0	14	1	2	0	0	0	1	0	0	0
veh./ora		0	51	4	3	3	0	0	6	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		0	53	4	5	5	0	0	19	0	0	0
Debit mediu orar PM		66										

Beneficiar: Municipiul Brasov
Localitatea: Brasov
Data: 21.07.2020

Pozitia km: intersectia giratorie Hornbach Brasov
Postul nr.: 3

RECENSAMANT DE CIRCULATIE

Sensul de circulatie: 3->1

Interval orar		Biciclete/ Motocicilete	Autoturisme	Microbuze cu max. 8+1 locuri	Autocamionete si autospeciale cu MTMA<=3.5	Autocamioane si derivate cu 2 axe	Autocamioane si derivate cu 3 sau 4 axe	Vehicule articulate (tip TIR) si remorchere cu trailer cu 3 sau 4 axe	Autobuze si autocare	Tractoare cu / fara remorca si vehicule speciale	Autocamioane cu 2, 3 sau 4 axe cu remorca (Tren rutier)	Vehicule cu tractiune animala
7:00	7:15	1	121	5	12	2	5	0	3	0	0	0
7:15	7:30	3	135	1	10	1	2	0	4	0	0	0
7:30	7:45	1	197	3	11	5	1	1	12	0	1	0
7:45	8:00	0	214	6	12	1	2	0	2	0	0	0
veh./ora		5	667	15	45	9	10	1	21	0	1	0
8:00	8:15	0	186	2	12	1	2	2	5	0	0	0
8:15	8:30	0	189	5	12	0	3	3	1	0	0	0
8:30	8:45	1	149	5	17	4	3	2	1	0	1	0
8:45	9:00	0	149	5	16	1	1	0	0	0	0	0
veh./ora		1	673	17	57	6	9	7	7	0	1	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		2	670	19	61	26	38	16	49	0	4	0
Debit mediu orar AM		885										
15:00	15:15	2	130	3	11	1	1	0	1	0	0	0
15:15	15:30	0	168	3	18	0	1	1	0	0	0	0
15:30	15:45	1	200	5	12	4	1	0	4	0	0	0
15:45	16:00	2	166	4	6	2	0	1	2	0	1	0
veh./ora		5	664	15	47	7	3	2	7	0	1	0
16:00	16:15	1	194	6	15	1	1	0	4	0	0	0
16:15	16:30	1	211	2	18	2	0	1	2	0	0	0
16:30	16:45	0	166	7	11	1	0	0	3	0	0	0
16:45	17:00	1	225	5	12	1	2	0	0	1	0	0
veh./ora		3	796	20	56	5	3	1	9	1	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		2	730	21	62	21	12	6	28	2	2	0
Debit mediu orar AM		885										

Beneficiar: Municipiul Brasov
Localitatea: Brasov
Data: 21.07.2020

Pozitia km: intersectia giratorie Hornbach Brasov
Postul nr.: 3

RECENSAMANT DE CIRCULATIE

Sensul de circulatie: 3->7

Interval orar		Biciclete/ Motocicilete	Autoturisme	Microbuze cu max. 8+1 locuri	Autocamionete si autospeciale cu MTMA<=3.5	Autocamioane si derivate cu 2 axe	Autocamioane si derivate cu 3 sau 4 axe	Vehicule articulate (tip TIR) si remorchere cu trailer cu 3 sau 4 axe	Autobuze si autocare	Tractoare cu / fara remorca si vehicule speciale	Autocamioane cu 2, 3 sau 4 axe cu remorca (Tren rutier)	Vehicule cu tractiune animala
7:00	7:15	0	3	1	0	0	0	0	1	0	0	0
7:15	7:30	0	13	1	2	0	0	0	1	0	0	0
7:30	7:45	0	10	0	1	0	0	0	2	0	0	0
7:45	8:00	0	12	0	1	0	0	0	1	0	0	0
veh./ora		0	38	2	4	0	0	0	5	0	0	0
8:00	8:15	0	23	0	5	0	0	1	1	0	0	0
8:15	8:30	0	20	0	3	1	1	0	1	0	0	0
8:30	8:45	0	22	1	2	0	0	0	0	0	0	0
8:45	9:00	1	23	2	5	0	0	0	0	0	0	0
veh./ora		1	88	3	15	1	1	1	2	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		0	63	3	11	2	2	2	12	0	0	0
Debit mediu orar AM		96										
15:00	15:15	0	42	0	3	0	0	0	1	0	0	0
15:15	15:30	0	34	0	5	0	0	0	0	0	0	0
15:30	15:45	0	39	1	2	0	0	0	2	0	0	0
15:45	16:00	0	27	0	3	0	0	0	0	0	0	0
veh./ora		0	142	1	13	0	0	0	3	0	0	0
16:00	16:15	3	36	3	3	0	0	0	2	0	0	0
16:15	16:30	0	39	3	3	0	0	0	1	0	0	0
16:30	16:45	0	32	0	0	0	0	0	1	0	0	0
16:45	17:00	2	42	0	0	0	0	0	0	0	0	0
veh./ora		5	149	6	6	0	0	0	4	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		1	146	4	11	0	0	0	12	0	0	0
Debit mediu orar AM		175										

Beneficiar: Municipiul Brasov
Localitatea: Brasov
Data: 21.07.2020

Pozitia km: intersectie giratorie Hornbach Brasov
Postul nr: 4

RECENSAMANT DE CIRCULATIE

Sensul de circulatie: 4->1

Interval orar		Biciclete/ Motociclete	Autoturisme	Microbuze cu max. 8+1 locuri	Autocamionete si autospeciale cu MTMA<=3.5	Autocamioane si derivate cu 2 axe	Autocamioane si derivate cu 3 sau 4 axe	Vehicule articulate (tip TIR) si remorchere cu trailer cu 3 sau 4 axe	Autobuze si autocare	Tractoare cu / fara remorca si vehicule speciale	Autocamioane cu 2, 3 sau 4 axe cu remorca (Tren rutier)	Vehicule cu tractiune animala
7:00	7:15	0	1	0	0	0	0	0	0	0	0	0
7:15	7:30	0	0	0	1	0	0	0	0	0	0	0
7:30	7:45	0	3	0	0	0	0	0	0	0	0	0
7:45	8:00	0	2	0	2	0	0	0	1	0	0	0
veh./ora		0	6	0	3	0	0	0	1	0	0	0
8:00	8:15	0	4	0	2	0	0	1	0	0	0	0
8:15	8:30	0	5	0	0	0	0	0	0	0	0	0
8:30	8:45	0	5	0	0	0	0	2	0	0	0	0
8:45	9:00	0	8	0	1	0	0	0	0	0	0	0
veh./ora		0	22	0	3	0	0	3	0	0	0	0
Coef echivalare veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		0	14	0	4	0	0	6	2	0	0	0
Debit mediu orar AM		25										
15:00	15:15	0	14	0	2	1	0	0	0	0	0	0
15:15	15:30	0	13	0	3	0	0	0	0	0	0	0
15:30	15:45	0	10	0	2	0	0	0	0	0	0	0
15:45	16:00	0	19	0	0	0	0	1	0	0	0	0
veh./ora		0	56	0	7	1	0	1	0	0	0	0
16:00	16:15	0	12	0	3	0	0	0	0	0	0	0
16:15	16:30	0	13	1	0	0	0	0	0	0	0	0
16:30	16:45	0	27	0	5	0	0	1	0	0	0	0
16:45	17:00	0	12	0	0	0	0	0	0	0	0	0
veh./ora		0	64	1	8	0	0	1	0	0	0	0
Coef echivalare veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		0	60	1	9	2	0	4	0	0	0	0
Debit mediu orar AM		75										

Beneficiar: Municipiul Brasov
Localitatea: Brasov
Data: 21.07.2020

Pozitia km: intersectie giratorie Hornbach Brasov
Postul nr: 4

RECENSAMANT DE CIRCULATIE

Sensul de circulatie: 4->5

Interval orar		Biciclete/ Motociclete	Autoturisme	Microbuze cu max. 8+1 locuri	Autocamionete si autospeciale cu MTMA<=3.5	Autocamioane si derivate cu 2 axe	Autocamioane si derivate cu 3 sau 4 axe	Vehicule articulate (tip TIR) si remorchere cu trailer cu 3 sau 4 axe	Autobuze si autocare	Tractoare cu / fara remorca si vehicule speciale	Autocamioane cu 2, 3 sau 4 axe cu remorca (Tren rutier)	Vehicule cu tractiune animala
7:00	7:15	0	0	1	0	0	0	0	0	0	0	0
7:15	7:30	0	4	0	0	0	0	0	0	0	0	0
7:30	7:45	0	1	0	2	0	0	0	0	0	0	0
7:45	8:00	0	3	0	1	0	0	0	0	0	0	0
veh./ora		0	8	1	3	0	0	0	0	0	0	0
8:00	8:15	0	4	0	0	0	0	0	0	0	0	0
8:15	8:30	0	8	0	5	0	0	0	0	0	0	0
8:30	8:45	0	6	1	2	0	0	0	0	0	0	0
8:45	9:00	0	19	0	2	0	0	0	0	0	0	0
veh./ora		0	40	1	9	0	0	0	0	0	0	0
Coef echivalare veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		0	24	1	7	0	0	0	0	0	0	0
Debit mediu orar AM		32										
15:00	15:15	0	25	1	4	1	0	0	0	0	0	0
15:15	15:30	0	28	1	1	0	0	0	0	0	0	0
15:30	15:45	1	35	0	2	0	0	0	0	0	0	0
15:45	16:00	1	34	1	3	0	0	0	0	0	0	0
veh./ora		2	122	3	10	1	0	0	0	0	0	0
16:00	16:15	0	17	1	2	0	0	0	0	0	0	0
16:15	16:30	1	27	1	1	0	0	0	0	0	0	0
16:30	16:45	0	21	0	1	0	0	0	0	0	0	0
16:45	17:00	1	21	3	2	0	0	0	0	0	0	0
veh./ora		2	86	5	6	0	0	0	0	0	0	0
Coef echivalare veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		1	104	5	10	2	0	0	0	0	0	0
Debit mediu orar AM		121										

Beneficiar: Municipiul Brasov
Localitatea: Brasov
Data: 21.07.2020

Pozitia km: intersectie giratorie Hornbach Brasov
Postul nr.: 4

RECENSAMANT DE CIRCULATIE

Sensul de circulatie: 4->6

Interval orar		Biciclete/ Motociclete	Autoturisme	Microbuze cu max. 8+1 locuri	Autocamionete si autospeciale cu MTMA<=3.5	Autocamioane si derivate cu 2 axe	Autocamioane si derivate cu 3 sau 4 axe	Vehicule articulate (tip TIR) si remorchere cu trailer cu 3 sau 4 axe	Autobuze si autocare	Tractoare cu / fara remorca si vehicule speciale	Autocamioane cu 2, 3 sau 4 axe cu remorca (Tren rutier)	Vehicule cu tractiune animala
7:00	7:15	0	0	0	0	0	0	0	0	0	0	0
7:15	7:30	0	0	0	1	0	0	0	0	0	0	0
7:30	7:45	0	1	1	0	0	0	0	0	0	0	0
7:45	8:00	0	1	0	0	0	0	0	0	0	0	0
veh./ora		0	2	1	1	0	0	0	0	0	0	0
8:00	8:15	0	0	0	1	0	0	0	0	0	0	0
8:15	8:30	0	5	0	2	0	0	0	0	0	0	0
8:30	8:45	0	2	0	0	0	0	0	0	0	0	0
8:45	9:00	0	5	0	0	0	0	0	0	0	0	0
veh./ora		0	12	0	3	0	0	0	0	0	0	0
Coef echivalare veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		0	7	1	2	0	0	0	0	0	0	0
Debit mediu orar AM		10										
15:00	15:15	0	0	0	1	0	0	0	0	0	0	0
15:15	15:30	0	3	0	1	0	0	0	0	0	0	0
15:30	15:45	0	6	0	3	0	0	0	0	0	0	0
15:45	16:00	0	6	0	2	1	0	0	0	0	0	0
veh./ora		0	21	0	7	1	0	0	0	0	0	0
16:00	16:15	0	5	0	1	0	0	0	0	0	0	0
16:15	16:30	2	13	0	2	0	0	0	0	0	0	0
16:30	16:45	0	15	0	0	0	0	0	0	0	0	0
16:45	17:00	0	13	1	3	0	0	0	0	0	0	0
veh./ora		2	46	1	6	0	0	0	0	0	0	0
Coef echivalare veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		1	35	1	8	2	0	0	0	0	0	0
Debit mediu orar AM		45										

Beneficiar: Municipiul Brasov
Localitatea: Brasov
Data: 21.07.2020

POST 2 - str. Institutului
POST 1 - str. Fanarului
POST 3 - str. Fanarului

Pozitia km: intersectie str. Institutului - str. Fanarului
Postul nr.: 3

RECENSAMANT DE CIRCULATIE

Sensul de circulatie: 1->2

Interval orar		Biciclete/ Motociclete	Autoturisme	Microbuze cu max. 8+1 locuri	Autocamionete si autospeciale cu MTMA<=3.5	Autocamioane si derivate cu 2 axe	Autocamioane si derivate cu 3 sau 4 axe	Vehicule articulate (tip TIR) si remorchere cu trailer cu 3 sau 4 axe	Autobuze si autocare	Tractoare cu / fara remorca si vehicule speciale	Autocamioane cu 2, 3 sau 4 axe cu remorca (Tren rutier)	Vehicule cu tractiune animala
7:00	7:15	0	1	0	0	0	0	0	0	0	0	0
7:15	7:30	0	3	0	0	0	0	0	0	0	0	0
7:30	7:45	1	2	0	0	0	0	0	0	0	0	0
7:45	8:00	0	2	0	1	0	0	0	0	0	0	0
veh./ora		1	8	0	1	0	0	0	0	0	0	0
8:00	8:15	0	1	0	0	0	0	0	0	0	0	0
8:15	8:30	0	1	0	0	0	0	0	0	0	0	0
8:30	8:45	0	1	0	0	0	0	0	0	0	0	0
8:45	9:00	0	3	0	0	0	0	0	0	0	0	0
veh./ora		0	6	0	0	0	0	0	0	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		0	7	0	1	0	0	0	0	0	0	0
Debit mediu orar AM		6										
15:00	15:15	0	2	0	0	0	0	0	0	0	0	0
15:15	15:30	0	2	0	0	0	0	0	0	0	0	0
15:30	15:45	0	1	0	0	0	0	0	0	0	0	0
15:45	16:00	0	1	1	0	0	0	0	0	0	0	0
veh./ora		0	6	1	0	0	0	0	0	0	0	0
16:00	16:15	0	5	0	0	0	0	0	0	0	0	0
16:15	16:30	0	7	0	0	1	0	0	0	0	0	0
16:30	16:45	0	3	0	0	0	0	0	0	0	0	0
16:45	17:00	0	2	0	1	0	0	0	0	0	0	0
veh./ora		0	17	0	1	1	0	0	0	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		0	12	1	1	2	0	0	0	0	0	0
Debit mediu orar PM		14										

Sensul de circulatie: 1->3

Interval orar		Biciclete/ Motociclete	Autoturisme	Microbuze cu max. 8+1 locuri	Autocamionete si autospeciale cu MTMA<=3.5	Autocamioane si derivate cu 2 axe	Autocamioane si derivate cu 3 sau 4 axe	Vehicule articulate (tip TIR) si remorchere cu trailer cu 3 sau 4 axe	Autobuze si autocare	Tractoare cu / fara remorca si vehicule speciale	Autocamioane cu 2, 3 sau 4 axe cu remorca (Tren rutier)	Vehicule cu tractiune animala
7:00	7:15	1	29	0	2	0	2	1	2	0	0	0
7:15	7:30	1	24	1	4	0	5	0	0	0	0	0
7:30	7:45	0	38	1	6	1	1	0	1	0	0	0
7:45	8:00	1	58	1	5	0	2	0	1	0	0	0
veh./ora		3	149	3	17	1	10	1	4	0	0	0
8:00	8:15	0	44	3	6	0	1	0	0	0	0	0
8:15	8:30	1	31	3	5	1	1	1	1	0	0	0
8:30	8:45	0	46	1	4	1	1	0	0	0	0	0
8:45	9:00	0	47	1	7	0	1	2	0	0	0	0
veh./ora		1	168	8	22	2	4	3	1	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		1	159	7	23	5	28	8	9	0	0	0
Debit mediu orar AM		240										
15:00	15:15	0	37	2	8	0	0	0	0	0	0	0
15:15	15:30	0	42	1	3	1	1	0	0	0	0	0
15:30	15:45	1	33	5	5	0	0	0	1	0	0	0
15:45	16:00	0	49	1	4	0	1	0	0	0	0	0
veh./ora		1	161	9	20	1	2	0	1	0	0	0
16:00	16:15	0	53	1	2	1	0	0	0	0	0	0
16:15	16:30	0	63	1	0	1	0	1	0	0	0	0
16:30	16:45	0	58	4	5	1	0	0	1	0	0	0
16:45	17:00	0	56	1	3	0	2	1	0	0	0	0
veh./ora		0	230	7	10	3	2	2	1	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		0	196	10	16	7	8	4	4	0	0	0
Debit mediu orar PM		246										

Beneficiar: Municipiul Brasov
Localitatea: Brasov
Data: 21.07.2020

POST 2 - str. Institutului
POST 1 - str. Fanarului
POST 3 - str. Fanarului

Pozitia km: intersectie str. Institutului - str. Fanarului
Postul nr.: 2

RECENSAMANT DE CIRCULATIE

Sensul de circulatie: 2->1

Interval orar		Biciclete/ Motociclete	Autoturisme	Microbuze cu max 8+1 locuri	Autocamionete si autospeciale cu MTMA<=3.5	Autocamioane si derivate cu 2 axe	Autocamioane si derivate cu 3 sau 4 axe	Vehicule articulate (tip TIR) si remorchere cu trailer cu 3 sau 4 axe	Autobuze si autocare	Tractoare cu / fara remorca si vehicule speciale	Autocamioane cu 2, 3 sau 4 axe cu remorca (Tren rutier)	Vehicule cu tractiune animala
7:00	7:15	0	0	0	1	0	0	0	0	0	0	0
7:15	7:30	0	0	0	0	0	0	0	0	0	0	0
7:30	7:45	0	0	0	0	0	0	0	0	0	0	0
7:45	8:00	0	1	0	1	0	0	0	0	0	0	0
veh./ora		0	1	0	2	0	0	0	0	0	0	0
8:00	8:15	0	1	0	1	0	0	0	0	0	0	0
8:15	8:30	0	3	0	1	0	0	0	0	0	0	0
8:30	8:45	0	2	0	0	0	0	0	0	0	0	0
8:45	9:00	0	2	0	0	0	0	0	0	0	0	0
veh./ora		0	8	0	2	0	0	0	0	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		0	5	0	2	0	0	0	0	0	0	0
Debit mediu orar AM		7										
15:00	15:15	0	2	0	0	0	0	0	0	0	0	0
15:15	15:30	0	4	0	1	0	0	0	0	0	0	0
15:30	15:45	0	2	0	0	0	0	0	0	0	0	0
15:45	16:00	0	1	0	0	0	0	0	0	0	0	0
veh./ora		0	9	0	1	0	0	0	0	0	0	0
16:00	16:15	0	2	0	0	0	0	0	0	0	0	0
16:15	16:30	0	2	1	0	1	0	0	0	0	0	0
16:30	16:45	1	6	0	0	0	0	0	0	0	0	0
16:45	17:00	0	4	1	0	0	0	0	0	0	0	0
veh./ora		1	14	2	0	1	0	0	0	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		0	12	1	1	2	0	0	0	0	0	0
Debit mediu orar PM		15										

Sensul de circulatie: 2->3

Interval orar		Biciclete/ Motociclete	Autoturisme	Microbuze cu max 8+1 locuri	Autocamionete si autospeciale cu MTMA<=3.5	Autocamioane si derivate cu 2 axe	Autocamioane si derivate cu 3 sau 4 axe	Vehicule articulate (tip TIR) si remorchere cu trailer cu 3 sau 4 axe	Autobuze si autocare	Tractoare cu / fara remorca si vehicule speciale	Autocamioane cu 2,3 sau 4 axe cu remorca (Tren rutier)	Vehicule cu tractiune animala
7:00	7:15	0	25	0	2	0	1	0	2	0	0	0
7:15	7:30	0	26	1	2	0	0	0	2	0	0	0
7:30	7:45	0	45	3	2	0	0	0	3	0	0	0
7:45	8:00	0	63	2	3	0	0	0	2	0	0	0
veh./ora		0	159	6	9	0	1	0	9	0	0	0
8:00	8:15	0	47	2	2	0	0	0	1	0	0	0
8:15	8:30	0	47	0	3	0	0	0	5	0	0	0
8:30	8:45	1	50	0	2	0	0	0	1	0	0	0
8:45	9:00	0	30	1	1	0	0	0	2	0	0	0
veh./ora		1	174	3	8	0	0	0	9	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		0	167	5	10	0	2	0	32	0	0	0
Debit mediu orar AM		236										
15:00	15:15	1	10	2	1	0	0	0	2	0	0	0
15:15	15:30	0	31	0	1	0	0	0	1	0	0	0
15:30	15:45	0	22	1	0	0	1	0	1	0	0	0
15:45	16:00	0	29	1	1	0	0	0	1	0	0	0
veh./ora		1	92	4	3	0	1	0	5	0	0	0
16:00	16:15	0	32	2	1	0	0	0	2	0	0	0
16:15	16:30	0	33	0	3	0	0	0	1	0	0	0
16:30	16:45	0	28	3	1	0	0	0	2	0	0	0
16:45	17:00	0	36	1	0	0	0	0	1	0	0	0
veh./ora		0	129	6	5	0	0	0	6	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		0	111	6	5	0	2	0	19	0	0	0
Debit mediu orar PM		143										

Beneficiar: Municipiul Brasov
Localitatea: Brasov
Data: 21.07.2020

POST 2 - str. Institutului
POST 1 - str. Fanarului
POST 3 - str. Fanarului

Pozitia km: intersectie str. Institutului - str. Fanarului
Postul nr.: 3

RECENSAMANT DE CIRCULATIE

Sensul de circulatie: 3->1

Interval orar		Biciclete/ Motocicilete	Autoturisme	Microbuze cu max. 8+1 locuri	Autocamionete si autospeciale cu MTMA<=3.5	Autocamioane si derivate cu 2 axe	Autocamioane si derivate cu 3 sau 4 axe	Vehicule articulate (tip TIR) si remorchere cu trailer cu 3 sau 4 axe	Autobuze si autocare	Tractoare cu / fara remorca si vehicule speciale	Autocamioane cu 2, 3 sau 4 axe cu remorca (Tren rutier)	Vehicule cu tractiune animala
7:00	7:15	0	29	0	4	0	1	1	1	0	0	0
7:15	7:30	0	33	2	4	0	0	1	0	0	0	0
7:30	7:45	0	34	1	5	0	3	0	0	0	0	0
7:45	8:00	0	31	2	1	0	0	0	0	0	0	0
veh./ora		0	127	5	14	0	4	2	1	0	0	0
8:00	8:15	0	26	3	10	0	1	0	0	0	0	0
8:15	8:30	0	32	1	3	0	1	1	0	0	0	0
8:30	8:45	0	23	0	5	0	1	0	0	0	0	0
8:45	9:00	1	34	0	3	0	1	0	0	0	0	0
veh./ora		1	115	4	21	0	4	1	0	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		0	121	5	21	0	16	6	2	0	0	0
Debit mediu orar AM		171										
15:00	15:15	2	57	4	12	1	0	1	1	0	0	0
15:15	15:30	0	67	3	5	1	0	1	2	0	0	0
15:30	15:45	2	40	1	12	0	1	0	0	0	0	0
15:45	16:00	2	61	2	11	0	0	0	0	0	0	0
veh./ora		6	225	10	40	2	1	2	3	0	0	0
16:00	16:15	0	48	3	1	0	0	1	0	0	0	0
16:15	16:30	0	66	0	3	1	0	0	1	0	0	0
16:30	16:45	0	60	3	3	0	2	0	0	0	0	0
16:45	17:00	0	76	3	7	0	0	0	2	0	0	0
veh./ora		0	250	9	14	1	2	1	3	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		2	238	11	32	5	6	6	11	0	0	0
Debit mediu orar PM		311										

Sensul de circulatie: 3->2

Interval orar		Biciclete/ Motocicilete	Autoturisme	Microbuze cu max. 8+1 locuri	Autocamionete si autospeciale cu MTMA<=3.5	Autocamioane si derivate cu 2 axe	Autocamioane si derivate cu 3 sau 4 axe	Vehicule articulate (tip TIR) si remorchere cu trailer cu 3 sau 4 axe	Autobuze si autocare	Tractoare cu / fara remorca si vehicule speciale	Autocamioane cu 2, 3 sau 4 axe cu remorca (Tren rutier)	Vehicule cu tractiune animala
7:00	7:15	1	11	1	2	0	0	0	1	0	0	0
7:15	7:30	0	12	0	1	0	0	0	3	0	0	0
7:30	7:45	0	19	2	1	0	0	0	2	0	0	0
7:45	8:00	0	15	1	0	0	0	0	2	1	0	0
veh./ora		1	57	4	4	0	0	0	8	1	0	0
8:00	8:15	0	17	1	0	0	0	0	2	0	0	0
8:15	8:30	0	21	0	1	0	0	1	2	0	0	0
8:30	8:45	0	13	0	1	0	0	0	1	0	0	0
8:45	9:00	0	15	1	0	0	0	0	2	0	0	0
veh./ora		0	66	2	2	0	0	1	7	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		0	62	4	4	0	0	2	26	2	0	0
Debit mediu orar AM		99										
15:00	15:15	0	32	0	0	0	0	0	0	0	0	0
15:15	15:30	0	20	1	1	0	0	0	1	0	0	0
15:30	15:45	0	33	1	3	0	0	0	4	0	0	0
15:45	16:00	1	37	1	2	0	0	0	1	0	0	0
veh./ora		1	122	3	6	0	0	0	6	0	0	0
16:00	16:15	0	32	2	1	0	0	0	1	0	0	0
16:15	16:30	0	33	1	0	0	0	0	1	0	0	0
16:30	16:45	0	35	2	2	0	0	0	2	0	0	0
16:45	17:00	1	51	0	2	0	0	0	1	0	0	0
veh./ora		1	151	5	5	0	0	0	5	0	0	0
Coef echivalare: veh fizice - v.e.t.		0.5	1.0	1.2	1.2	3.5	4.0	4.0	3.5	3.0	4.0	3.0
MZA - v.e.t.		1	137	5	7	0	0	0	19	0	0	0
Debit mediu orar PM		168										