

### CITY OF GAINESVILLE

### Public Works Department

October 7, 2002

To: Property Owners, Cedar Grove and Duval Heights Neighborhood

From: Public Works Department - Transportation Services Division

Subject: Public Hearing on Roads in Cedar Grove

At the Monday, October 14, 2002, meeting, the Gainesville City Commission will conduct a public hearing on the temporary street modifications in the Cedar Grove neighborhood. The Public Works Department has prepared a report on this issue and it is attached.

### Public Works is recommending:

- The street modifications on NE 22<sup>nd</sup> Street and NE 23<sup>rd</sup> Street in the Cedar Grove II neighborhood be made permanent. This would include installation and maintenance of landscaping by the Cedar Grove II Homeowners Association.
- 2. From a transportation viewpoint, the Public Works Department recommends that NE 12<sup>th</sup> Avenue be opened to provide maximum connectivity and distribution of traffic flow. We recognize that there are circumstances that may go into consideration of a permanent closure of NE 12<sup>th</sup> Avenue that have less to do with transportation as with livability of a neighborhood. If the City Commission chooses to provide permanent closure of NE 12<sup>th</sup> Avenue between Cedar Grove II and the Duval Heights neighborhoods, the closure needs to be designed with: 1) a gate that the Fire Rescue Department can activate to pass through, and 2) provide access for pedestrians and bicyclists without having to activate the gate. The Cedar Grove II Homeowners Association should be responsible for all the costs associated with the installation and maintenance of an emergency gate system.

The recommendation to the Commission is to hear a presentation and take appropriate action.

The time and location of the City Commission meeting is:

When: Monday, October 14, 2002.

Time: The Public Hearing starts at 6:00 p.m. or as soon thereafter as can be heard.

Location: Gainesville City Hall, 200 East University Avenue.

Please contact the Public Works Department at 334-5074, if you have any questions.

Sincerely,

Brian Kanely, P.E.

Transportation Services Manager

Copies: City Commission

Wayne Bowers, City Manager

Teresa Scott, P.E., Public Works Director

Richard Williams, Fire Chief Norman Botsford, Police Chief

Enclosures

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## STAME TO SELECT

### Cedar Grove/Duval Heights Traffic Study

The Public Works Department has obtained a series of traffic counts in Cedar Grove/Duval Heights. These traffic counts are classified into two categories; Average Daily Traffic (24 hour, 2 way) counts and manual traffic counts. The traffic counts are shown on the attached drawings. The description of the traffic counts; impact of the opening of NE 12<sup>th</sup> Avenue and conclusions with respect to traffic patterns in the Cedar Grove/Duval Heights neighborhood is as follows.

### Average Daily Traffic (24-hour, 2-way) Counts

These traffic counts are obtained by mechanical traffic counting equipment installed by the Public Works Department. The traffic counts represent the total number of vehicles during a 24-hour period that pass in both directions over the road tube attached to the traffic counter. These counts are referred to as Average Daily Traffic (ADT) counts because they represent the traffic volumes on the street during a 24-hour period.

The Public Works Department obtained four series of traffic counts as follows:

October 1996:

Before construction of Cedar Grove II and NE 12th Avenue.

July 2000:

After Cedar Grove II and NE 12<sup>th</sup> Avenue open. Same street configuration as July 2000 counts.

December 2001: September 2002:

After street modifications in place for six months (complete closure on NE 12<sup>th</sup>

Avenue – 2300 block and one way configuration for intersections on NE 11<sup>th</sup> Place

at NE 22<sup>nd</sup> Street and NE 23<sup>rd</sup> Street).

The results of the average daily traffic counts are:

- NE 12<sup>th</sup> Avenue is an important access for the neighborhood. This is evidenced by (1) the volume of traffic on NE 12<sup>th</sup> Avenue, 1014 vehicles per day which is just below the volume for a minor collector street and (2) the fact that the traffic entering/exiting the neighborhood via NE 8<sup>th</sup> Avenue decreased from 4130 to 3597 vehicles per day (13%) from October 1996 to September 2002 (some neighborhood traffic has rerouted to NE 12<sup>th</sup> Avenue for ingress/egress to Waldo Road).
- 2. The street modifications implemented in Spring 2002 significantly decreased traffic on NE 12<sup>th</sup> Avenue from 1498 to 1014 vehicles per day (vpd). This is a decrease of 33%. This indicates the street modifications discourage neighborhood and/or external traffic from cutting through Cedar Grove II.
- 3. Traffic decreased on NE 22<sup>nd</sup> Street and increased on NE 23<sup>rd</sup> Street between NE 10<sup>th</sup> Avenue and NE 11<sup>th</sup> Place (traffic volumes are more balanced). This was the expected result of the one-way street modifications. Before the street modifications, the traffic counts on NE 22<sup>nd</sup> Street and NE 23<sup>rd</sup> Street-1000 block were 630 and 336 vpd respectively. The traffic counts on NE 22<sup>nd</sup> Street and NE 23<sup>rd</sup> Street-1000 block after the street modifications are 571 and 606 vpd respectively. This indicates the street modifications achieved the goal of more equally distributing the traffic on these two streets.

### **Manual Traffic Counts**

Manual traffic counts are obtained by placing Public Works Department employees at various locations in the neighborhood and manually counting vehicles during a given time period. Manual traffic counts were obtained at the three intersections connecting Cedar Grove I and II before and after the street modifications implemented in Spring 2002. The manual counts were 12 hours in duration (6:00 a.m. to 6:00 p.m.) on a weekday. The manual counts are very useful to determine the patterns of traffic at an intersection because traffic turning left, right and through are counted separately. By counting traffic before and after a street modification, the impact of that modification can be accurately determined. The results of the manual traffic counts are:

1. At the intersection of NE 22<sup>nd</sup> Street and 11<sup>th</sup> Place (northbound traffic on 22<sup>nd</sup> Street prohibited through the intersection) northbound traffic decreased by 189 vehicles, southbound traffic increased by 105 vehicles, southbound turning east traffic decreased by 179 vehicles and

- westbound turning north traffic increased by 23 vehicles. The redistribution of traffic is consistent with the prohibition on northbound traffic through the intersection and the one-way pattern of the street modifications. Total traffic through the intersection decrease by 240 vehicles. This is consistent with the decrease observed in the Average Daily Traffic counts on NE 12<sup>th</sup> Avenue.
- At the intersection of NE 23<sup>rd</sup> Street and 11<sup>th</sup> Place (southbound traffic on 23<sup>rd</sup> Street prohibited through the intersection) northbound traffic increased by 194 vehicles, southbound traffic decreased by 67 vehicles, eastbound turning north traffic decreased by 116 vehicles and southbound turning west traffic decreased by 111 vehicles. The redistribution of traffic is consistent with the prohibition on southbound traffic through the intersection and the one-way pattern of the street modifications. Total traffic through the intersection decreased by 100 vehicles. This is consistent with the decrease observed in the Average Daily Traffic counts on NE 12<sup>th</sup> Avenue.

### Conclusions

The conclusions from the traffic study are as follows:

- NE 12th Avenue is an important access to the Cedar Grove/ Duval Heights area. The combination of NE 8th Avenue and NE 12th Avenue provide travel options for all residents and provides multiple access routes for emergency service vehicles.
- The street modifications have decreased traffic volumes on NE 12th Avenue and in Cedar Grove II while maintaining access to both NE 8<sup>th</sup> Avenue and NE 12<sup>th</sup> Avenue for all residents.

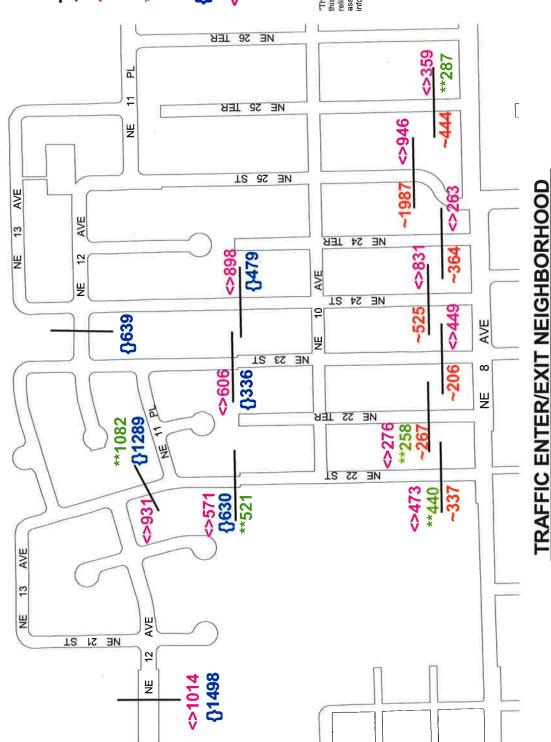
  Traffic volumes have been balanced on NE 22<sup>nd</sup> Street and NE 23<sup>rd</sup> Street. This redistribution of
- traffic minimizes impacts on any one street in the neighborhood.

### NE 12th Avenue - Hourly Distribution of Traffic

The table below is a listing of the hourly traffic volumes on NE 12th Avenue – 2100 block. It provides the hourly traffic volume east and west at this location and is further broken down into total vehicles per minute for each hour of the day the traffic count was obtained (Monday/Tuesday, September 16/17, 2002).

<u>Time</u>	<b>East</b>	West	<u>Total</u>	Veh/Min
12am	12	6	18	0.03
1am	7	8	15	0.25
2am	7	3	10	0.17
3am	2	1	3	0.05
4am	1	1	2	0.03
5am	1	4	5	0.08
6am	4	5	9	0.15
7am	7	19	26	0.43
8am	13	49	62	1.03
9am	38	46	84	1.40
10am	13	21	34	0.57
11am	21	19	40	0.67
12pm	22	25	47	0.78
1pm	22	11	33	0.55
2pm	39	30	69	1.15
3pm	39	31	70	1.17
4pm	21	28	49	0.82
5pm	34	26	60	1.00
6pm	60	31	91	1.52
7pm	55	33	88	1.47
8pm	36	36	72	1.20
9pm	38	21	59	0.98
10pm	28	17	45	0.75
11pm	25	10	35	0.58

# **CEDAR GROVE - DUVAL HEIGHTS**



## TRAFFIC COUNTS

~Before Cedar Grove II (October, 1996)

\*\*After Cedar Grove II (July, 2000) {}December, 2001 Counts <>September, 2002 Counts

Counts are 24 hour ADT

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N.T.S

CITY OF GAINESVILLE PUBLIC WORKS DEPARTMENT SEPTEMBER, 2002

Traffic Enter/Exit via NE 8th Ave

Before Cedar Grove II: 4130 September, 2002: 3597 (-533)

2: 3597 (-533) (-13%)

Traffic Enter/Exit via NE 12th Ave

Before Traffic Calming: 1498 After Traffic Calming: 1014 (~

After Traffic Calming: 1014 (-494) (-33%)

### (xxx) After Modifications (September 10, 2002) xxx Before Modifications After Modifications Counts are 12 Hours (March 2, 2002) Illegal Manuver (6 AM - 6 PM) Z N.T.S. Legend 빙 IS 52 NE AVE EXIT ONLY Fotal Change = -100 **CEDAR GROVE ROADS** Open to bike & pedestrian traffic only. 45 €2 50 €2 70 €2 TER 54 BΝ Street closed to vehicular traffic. 49 +194 +194 (2) -20 -20 City of Gainesville Public Works Department September, 2002 岁 (35) -116 IS 74 NE 罗 23 NE IS 22 NE TER 쒿 PARK 22 NE 227 (250) The City of Gainesville has prepared the information depicted on this map for its own use. It is not intended to be, nor should it be, relied upon by others for any purpose. The City of Gainesville assumes no responsibility for errors or omissions in the information on this map." Total Change = -240 28 (68) +40 → 180 (245) +65 ENTER ONLY IS 71 NE

